

PE05-324S

Special Study

# Telecommunications, Informatics and Media Sector Policies

May 2006

Evaluation Department  
(EvD)



**European Bank**  
for Reconstruction and Development

## **PREFACE**

This review is an evaluation of the European Bank for Reconstruction and Development's Telecommunications Sector Policy and past performance in the telecommunications sector. It has been carried out by Albert Stocker, Senior Evaluation Manager of the Bank's independent Evaluation Department (EvD). He was assisted by Friedrich W. Kraemer, a senior industry specialist. The German Technical Cooperation (TC) Fund provided the financing for this consultancy assignment. The EBRD's Telecommunications, Informatics and Media Policies (subsequently abbreviated as "telecom" policies) of 1992 and 1999, and the telecom projects and TC operations signed between 1991 and 2005, form the basis of this review. The review is intended to help the Bank update its telecom sector policy. Its objectives are to: (a) review the EBRD's telecom sector policies of 1992 and 1999; (b) assess the Bank's performance in the sector; (c) summarise evaluation findings and lessons learned and (d) identify challenges and opportunities for the future.

Chapter 1 describes the initial conditions in the telecom sector, the policy objectives and the Bank's response to the sector challenges. Chapter 2 describes the EBRD's activities in the telecom sector and the trends in the investment portfolio, and gives an overview of the TC projects. Chapter 3 looks at the project level performance by summarising the quality of the evaluated projects based on the results of completed project evaluation reports. Chapter 4 provides an overall sector level performance rating for the Bank's telecom work. It assesses sector level performance based on the relevance, efficacy, efficiency and impact of the Bank's activities in the countries of operations. Case studies in four countries of operations were undertaken in order to further deepen the transition impact analysis and to derive lessons for future operations. Chapter 5 makes recommendations for consideration by management.

**SPECIAL STUDY**  
**TELECOMMUNICATIONS, INFORMATICS AND MEDIA SECTOR POLICIES**

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**SPECIAL STUDY**  
**TELECOMMUNICATIONS, INFORMATICS AND MEDIA SECTOR POLICIES**

**ABBREVIATIONS**

<b>CATV</b>	Community Antennae Television
<b>DAI</b>	Digital Access Index
<b>DIF</b>	Direct Investment Facility
<b>DOT Force</b>	Digital Opportunity Task Force
<b>EvD</b>	Evaluation Department (EBRD)
<b>ICS</b>	Information and Communication Services
<b>ICT</b>	Information and Communication Technology
<b>IFI</b>	International Finance Institution
<b>LTP</b>	Legal Transition Programme
<b>LTT</b>	Legal Transition Team
<b>MDGs</b>	Millennium Development Goals
<b>OCE</b>	Office of the Chief Economist (EBRD)
<b>OPER</b>	Operation Performance Evaluation Review
<b>SME</b>	Small and Medium Enterprise
<b>TC</b>	Technical Co-operation
<b>TI</b>	Transition Impact
<b>TIR</b>	Transition Impact Retrospective
<b>VoIP</b>	Voice over Internet Protocol
<b>XMR</b>	Expanded Monitoring Report
<b>XMRA</b>	Expanded Monitoring Report Assessment

**DEFINED TERMS**

<b>the Bank</b>	European Bank for Reconstruction and Development.
<b>the Review Team</b>	Staff of the Evaluation Department and independent sector consultants who jointly carried out the study.

## EXECUTIVE SUMMARY

The Bank's overall response between 1991 and 2005 to the Telecommunications, Informatics and Media (Telecom) sector transition challenges in its countries of operations has been *successful*. This evaluation result is based both on EvD's project level performance analysis and on the sector level performance assessment considering the entire period (see Chapters 2-4). When the evaluation outcomes of telecoms projects are viewed in the context of a broader analysis using the sector policy indicators (relevance, efficacy, efficiency and impact), it is found that the strong results for efficacy and efficiency (*good* and *excellent*) are somewhat tempered by *satisfactory/good* impact ratings for relevance and impact. This is partly because projects are analysed in a sector context where successful transition impact relies not only on market expansion and increased competition, such as through the support of mobile telephone companies, but also on adequate privatisation, regulation, skills transfer, network modernisation and corporate governance. While the Bank has put great emphasis on efficacy and efficiency, the objectives of relevance and impact, which are also part of the policies, have received less attention.

The review of the transition impact by country and an analysis of the remaining challenges show that the Bank has had a significant impact in the telecom sector in some of the advanced and intermediate transition countries. This is due to its role in enterprise restructuring in the early years and in the expansion of markets through support of the mobile sub-sector in later years. Best results were achieved in six countries with a clear EU accession focus and/or strong sector reform support by the government. A moderate impact was achieved in a group of 13 countries. However, in 11 countries (41 per cent of all countries of operations) there are large remaining transition challenges. In six of these countries (22 per cent), the Bank's impact was either minimal or none. This special study includes a detailed review of four countries to deepen the transition impact analysis in order to derive meaningful lessons for future operations. The selected country case studies are summarised in Chapter 4.6.

The *excellent* performance in terms of efficiency (the profitability of the telecom operations) should not lead to complacency, since the business environment for the Telecom team has substantially changed compared to the period under review (1991-2005). The few remaining large privatisations are challenging and most first and second mobile licences have been awarded, resulting in smaller and riskier future operations in countries with large remaining transition challenges. Such perspectives will require a new Bank approach. In recent years, the Telecom team has encountered a quickly decreasing additionality in lending to classical fixed line and mobile telephone companies which represent 70 per cent of the Bank's investments. The team's response was to diversify into the areas of cable TV, broadband and information and communication technologies. Most recently, the Telecom team has also increased its activities in the media area: television broadcasting, outdoor advertising, media content, press printing and publishing, radio broadcasting and other media projects. Some of these operations will come up for evaluation shortly and could therefore not be considered in this study which has as its focus the telecommunications sector. The Telecom team has also substantially reduced its staff

from 30 in the mid 1990s to nine now. In-house technical expertise was also reduced in a similar proportion.

The Review team makes the following main recommendations:

- A new Bank Telecom Sector Operations Policy is required and should address changing needs more clearly, in particular those of the early and intermediate transition countries. A further strengthening of the relevant sector strategies in the country strategy documents is also suggested to provide more specific operational guidance.
- Sector dialogue with countries of operations with large remaining sector transition challenges needs to be intensified.
- Despite the impressive expansion of coverage of the mobile footprint, continued attention is necessary to restructure and upgrade fixed line telephone services (including fixed wireless) in some countries of operations where this remains a competitive and profitable business. The technology should be defined by the market.
- Given the quickly changing telecom landscape and technology, it may also be necessary to further intensify the development of new financing models (possibly Infrastructure Funds) to finance the replacement or expansion of existing infrastructure, new broadband and future infrastructure (such as Next Generation Networks, initially in CEB countries). Alternatives already involve small and medium-sized enterprise (SME) or Direct Investment (DIF) facilities to enable the expansion of coverage in rural areas, for example by internet service providers. Lessons learned from past operations in these areas may contribute to improved operation design and better monitoring procedures. If these typically smaller and sometimes riskier projects should become a more significant part of overall operations, substantial additional staff resources may become necessary.
- The Bank should consider an intensification of Technical Cooperation in order to be more actively involved in providing guidance regarding an appropriate sequencing of sector reform steps which would take into account the specific circumstances of each country. TC assistance should continue to be extended beyond sector reform design, into practical application and the initial operational phase of regulation. Considering the remaining challenges in the early and intermediate transition countries' sector environment, the Review team believes that the Bank should allocate more resources to the Legal Transition team (LTT). Both the Telecom team and LTT should continue to seek ways to build a higher degree of measurable conditionality into the TC assignments by linking the delivery of TC assignments to specific sector reform decisions by the government. Specific incentives for staff members undertaking TC assignments should be introduced in the overall compensation levels to reduce the present negative bias when compared with investment operations.
- The resource allocation in terms of staffing and level of in-house expertise needs to be reviewed on the basis of a new Telecom Operations Policy.

## **1. The Bank's telecom sector policies**

This section describes and assesses the successive Bank sector policies in the telecom sector in relation to the business environment that the Bank was facing at those times and the rapid changes in that environment.<sup>1</sup> The Bank established a first policy in 1992 and, in view of the development of events in the sector, revised its policy in 1999.

### ***1.1 Initial sector conditions in the early 1990s***

Along with most other sectors of the economy at the start of the transition, the telecom sector shared the strong influence of state ownership. The telecom sector's shortcomings at the beginning of the 1990s in the countries of operations can be summarised as follows:

- severe imbalances between demand and supply of services
- chronic under-investment
- high operating inefficiencies and low return on capital due to low subscriber tariffs
- lack of commercial focus
- lack of management experience
- structural inefficiencies
- in general, unfavourable political, sector policy and economic conditions for the required stable growth of the sector
- a totally different understanding (in comparison with the Western-orientated world) of the telecom sector's role and essential characteristics in a commercial and social sense (although this was much less the case in countries such as Hungary, Poland, the Czech Republic, Slovenia or the Baltic states).

### ***1.2 The Bank's first response: the 1992 sector policy***

The Bank reacted promptly in issuing its first Telecommunications Operations Policy in 1992.<sup>2</sup> The Bank intended to take a leading advisory role in regulatory affairs throughout the region. Its objective was to assist countries in developing a strong and viable telecommunications infrastructure for provision of basic services, to achieve structural reforms and to further promote institutional development. The task directly reflected the Bank's mandate to "foster transition towards open market-oriented economies and to promote private initiative", and to "assist the recipient member countries to implement structural and sectoral economic reforms, including de-monopolisation, decentralisation and privatisation".

The 1992 overall Bank objectives were very broadly defined and, though still valid today, they are no longer relevant for tackling future challenges. In addition, the first sector policy overestimated the self-financing potential of public network operators and service providers in the region.<sup>3</sup>

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<sup>1</sup> See Appendix 2 for a summary description of the structural changes in the sector over the last 15 years.

<sup>2</sup> The Bank uses the term Telecommunications, Informatics and Media, which is abbreviated in this study to Telecom.

<sup>3</sup> The fast growth of mobile services created strong competition and took lucrative call traffic and corporate accounts from public network operators. Tariff setting by public network operators is restricted by political sensitivities, and internal cash flow generation for network upgrading was therefore insufficient.

### *1.3 New dynamics in the telecom sector during the 1990s*

The telecom landscape altered dramatically during the 1990s, shifting from state-owned monopolies towards state-offered licences for private mobile telephony companies and incorporating varying degrees of privatisation of incumbent fixed line providers. The sector witnessed rapid technological change and the massive rollout of basic Information and Communication Technology (ICT) infrastructure.<sup>4</sup> This made it possible to provide communications solutions fast and with very attractive returns to investors. Large international telephony companies were seeking quickly to develop strong market shares in emerging markets in the East and elsewhere. This trend was joined by fast-growing access to the internet as a key element of a knowledge-based highly competitive economy. The Bank was following these new opportunities and provided financing and political risk cover to these industry investors.

Regarding the sub-sector of media, the Board was informed in May 1994 about the Guidelines for the Bank's Involvement in Electronic Media and Broadcasting Projects. These guidelines clearly stated that the Bank's involvement in media projects would principally concentrate on those countries with an acceptable regulatory framework, that is to say a framework considered to be broadly in line with relevant European Union legislation. The Board was also given assurances that the Bank would make every effort to ensure that it did not associate itself with unsavoury or sensitive material.

### *1.4 The Bank's second response: the 1999 sector policy*

This change of environment and the experience accumulated by the Bank in the early years prompted a second Telecommunications Operations Policy in 1999. This was more strongly designed and was influenced by a transaction approach rather than by a broader ICT sector development approach (see Table 1). The policy fails to demonstrate clearly that sector reform is a complex process which may proceed in a different sequence of events in any country. The main objectives were: to promote sustainable network expansion; to increase telephone density and improve service quality; to foster the emergence of innovative services; and to assist the incumbent operator and the government to accelerate privatisation. The 1999 policy pays appropriate attention to rural telecommunications, which are expected to become more important in reducing the access gap. It also rightly promotes diversification of the Bank's portfolio into modern services and new Information and Communication Services (ICS) market segments, particularly in early and intermediate transition countries (diversification into new sub-sectors such as media and commercial broadcasting or CATV (Community Antennae Television, now more commonly known as cable TV. In addition to bringing television programmes to those millions of people throughout the world who are connected to a community antennae, cable TV is an increasingly popular way to interact with the world wide web and other new forms of multimedia information and entertainment services).

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<sup>4</sup> ICT: hardware, software, networks and media for the collection, storage, processing, transmission and presentation of information. See details in Appendix 2.

Table 1: Comparison of overall bank sector objectives 1992-99

1992	1999
<ul style="list-style-type: none"> <li>• Assist countries to develop strong and viable telecommunications infrastructure for the provision of basic services</li> <li>• Foster the development of enhanced services</li> <li>• Promote major institutional development programmes aimed at improving public telecommunications operators' management and organisational skills and effectiveness</li> <li>• Assist in structural reforms</li> </ul>	<ul style="list-style-type: none"> <li>• Promote sustainable network expansion, increase telephone density and improve quality of service</li> <li>• Foster emergence of innovative and advanced services crucial for the overall competitiveness of businesses within the country</li> <li>• Assist the incumbent operator and the government to accelerate privatisation</li> <li>• Develop appropriate regulatory and legal frameworks</li> <li>• Promote the development of the sector beyond basic telephone services, including media-related services and services which promote access to communications and information</li> </ul>

The Bank's views on the sequencing of sector reform steps and the consequences were, however, not clearly spelt out. Increasingly, project opportunities were identified in the more advanced countries with a sound regulatory framework. The Bank's financing focus shifted to the private sector and concentrated on pre-privatisation and privatisation financing. Privatisation of incumbents should not be considered in isolation. It is part of a broader reform process. Privatisation should ideally happen once the sector is well prepared to absorb it, where a sound regulatory regime and independent regulator are in place, where full liberalisation and competition have been achieved and where a new monopoly will likely be avoided.

The 1999 policy also mentioned the widening gap in sector development between CEE and Commonwealth of Independent States (CIS) countries and stressed the role of the private sector as a key lever in this context. Similarly, the weak legal and regulatory framework in the region was identified as an obstacle to private sector entry to the market. The Bank also recognised that significant external assistance was required to implement necessary reforms. However, the Bank preferred to provide countries with technical assistance only after they had expressed a genuine interest in undertaking a major reform policy.<sup>5</sup> While this approach was expected to accelerate the realisation of investment projects, it did not fully recognise the importance of continuous sector dialogue aiming at a comprehensive sector reform in all countries of operations.<sup>6</sup>

<sup>5</sup> The telecom team and Legal Transition Team (LTT) are of the view that TC operations with a sector reform focus should be restricted to countries which have committed to reform and where there is a likelihood of major follow-up investment projects for the Bank. The review team, however, considers that the classification of countries into the categories of "committed" or "not committed" to reform is rather intricate. Three main assessing conditions need to be taken into account: political desirability, political feasibility and the credibility of state-owned enterprise reform. Since in most countries these conditions are evolving, the mandate of the Bank suggests that continuous efforts are appropriate.

<sup>6</sup> After the initial period of work where there was a focus on "fixed line modernisation with a dollop of reform" projects into the broader business of ICT.. The telecom team also feels that this special study does not give enough importance to the role of the private sector and its effect on markets. The review

In line with the 1999 telecom sector policy, the Bank also concluded a Memorandum of Understanding (MoU) with the European Commission (2001, presently being updated). The purpose of the MoU is to improve cooperation between the EBRD and the European Commission in the telecom sector. Of particular interest for this sector study is the preamble which confirms that “IFI finance should be focused on promoting the fundamental reforms, namely liberalisation and an effective regulatory environment”. Both the *acquis communautaire* and World Trade Organization rules require a regulatory framework which guarantees objectivity, transparency and non-discrimination. It was also agreed that “investment projects involving incumbent operators have the greatest scope for persuading the Government to introduce regulatory reform”.

The review team is of the view that the Bank’s telecom operations policy objectives should have more clarity and focus. Changing needs, particularly those of early and intermediate transition countries, need to be more clearly addressed.

### *1.5 A further policy clarification: the 2001 telecom event line*

Later, the first Transition Impact Retrospective (TIR), issued in April 2001, clarified the priorities in the policies that would tend to promote sustainable transition impact. It suggested the following steps, which had already been broadly endorsed in the above-mentioned policies:

- corporatisation of the industry by separating telecommunications from postal services, as well as separating sector policy-making, operations, regulation and ownership of sector assets<sup>7</sup>
- introduction of a basic legal and regulatory framework with a view to the commercialisation of the incumbent fixed-line operator
- development of the regulatory framework aimed at promoting the emergence of competition
- private sector involvement through mobile telephony and privatisation of the incumbent fixed line operator
- extension of the sector through value added services (internet and data transmission)
- ultimately, complete liberalisation of fixed line and advanced services.

Table 2 lists the elements of the event line from the 1999 Telecom Sector Policy. The table links the event line elements to the corresponding indicators and generic challenges.

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team believes that the evaluations by EvD in terms of OPERs and XMRA as presented later fully consider the many positive aspects of the private sector projects for competition and market expansion. The review team merely suggests that a better balance between public and private sector interventions would be more fitting for an international finance institution (IFI) and more in accordance with Article 2 of the Bank’s mandate.

<sup>7</sup> The telecoms team is of the view that a move away from fixed line was appropriate.

Table 2: Telecom sector event line elements and transition impact categories

Transition impact categories	Transition impact indicators	Telecom sector event line elements
Structure and extent of markets	<b>Indicators 1 and 2</b> <b>Enabling free and fair prices, competition and market expansion</b>	Separation of telecommunications from postal services via the setting-up of a joint-stock company  Separation of the four key functions: policy-making, operations, regulation and ownership of telecom assets
Market-supporting institutions and policies	<b>Indicator 3</b> <b>Privatisation, restructuring of state-owned companies, enabling participation of private sector</b>	Regulation of tariff setting mechanisms for retail prices and interconnection charges; elaboration of rules to preclude predatory use of market
	<b>Indicator 4</b> <b>Frameworks for markets, institutional and sector reforms</b>	Perfection of the legal framework for private operators to ensure increased competition
Market-based behaviour	<b>Indicators 5 to 7</b> <b>Skills transfer, demonstration effects and improvement of private sector business practices and standards</b>	Private sector involvement through emergence of second operators and local telecommunications companies, mobile telephony and privatisation of incumbent fixed line operator  Complete liberalisation of fixed line and advanced services

## 2. The Bank's telecom portfolio

This section gives an overview of the Bank's investments in the telecom sector as executed by the telecom team. It also presents the Bank's TC assignments in this sector.

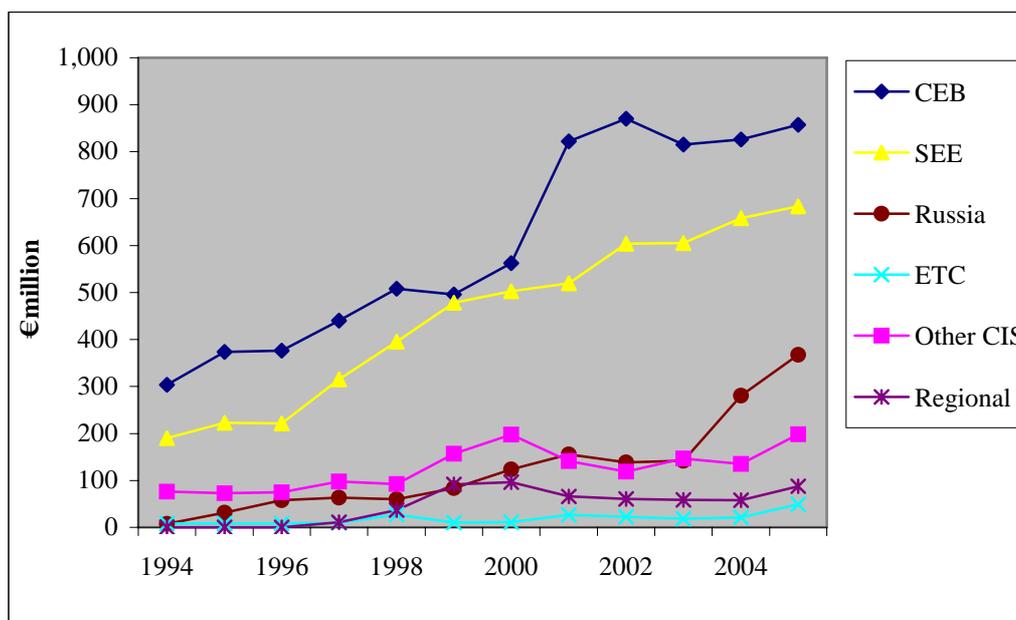
### 2.1 Overview of the Bank's activities in the telecom sector

Between 1991 and 2005, the Bank undertook 90 projects in the telecom sector. Investments were mostly in the fixed line and mobile sub-sectors, and debt has been the primary instrument.<sup>8</sup> The Bank's cumulative investments in the telecom sector represented, by the end of 2005, about 7.4 per cent of the Bank's total investment portfolio. Total investments in terms of project size, including EBRD and other investment, exceed €10 billion. The top recipient countries are Hungary, Poland,

<sup>8</sup> Detailed characteristics of the portfolio in terms of growth, sector and regional decomposition are given in Appendix 3.

Romania and Russia. These four countries combined received 57 per cent of the total EBRD investment. A breakdown of the cumulative changes by region is given in Chart 1. The numbers show no new commitments, and indeed some cancellation of commitments, to central Europe and the Baltic states (CEB) since 2002. Chart 1 also shows a decrease in new commitments to south-eastern Europe (SEE), while the CIS commitments have been increasing in recent years.<sup>9</sup>

Chart 1: Net cumulative investment commitments by regional groupings (€ million)



The total portfolio is invested in the state sector (25 per cent) and in the private sector (75 per cent). Investment in the CEB state sector ceased in 1996, while state sector operations are declining in both SEE and CIS (without Russia). In some cases state assets were privatised and the Bank followed some of these companies in the private sector. Russia is a fully “private sector country” since no state sector operation has been undertaken there so far. The Telecom Team has maintained sector and TC dialogue with Russia, but to date has not been able to agree a state sector operation.

A breakdown of state and private sector projects shows that, until 1996, the Bank was equally active both in the state sector (typically a fixed line network operated by the incumbent) and in the private sector (predominantly mobile network or networks). Although private sector mobile operations quickly increased coverage and competition and were highly profitable, they did not offer conditionality on crucial sector reform targets which would ensure the balanced development of the sector.

Because additionality for the Bank is decreasing when lending to fixed line and mobile telephone companies in the more advanced countries, the Telecom Team has actively diversified into the areas of cable TV, broadband and information and communication technologies. Three specialised investment funds focused on the ICT industry were established. More recently, the telecom team has also increased its

<sup>9</sup> Breakdowns of Bank investment by year and by country are provided in Appendix 3.

activities in the media area, including television broadcasting, outdoor advertising, media content, press printing and publishing, radio broadcasting and other media projects. The first film distribution project was financed in 2004. The telecom team has also studied Universal Access issues and contributed to the Concept Paper “ICT Strategy Direction: Business Incubators and Seed Funds for Small Businesses”.

The telecom team has also substantially reduced its staff from 30 in the mid-1990s to 9 now. In-house technical expertise (the number of engineers and senior sector specialists) was also reduced in similar proportion. This may explain to some degree why the telecom team’s focus seemed to shift more towards investment operations and away from TC assignments as reviewed in the following section.

## ***2.2 Technical cooperation and policy dialogue***

The Bank has undertaken 133 TC assignments in various areas. The largest number (48) focused on various aspects of the regulatory framework, policy and strategy. This includes 22 TC commitments by the Legal Transition Programme (LTP) managed by the Legal Transition Team (LTT).

Chart 2 shows that financial TC commitments have been in decline since 1993, although they temporarily accelerated in 1999. Albania, Bosnia and Herzegovina and Tajikistan have been the top TC receiving countries, both in terms of the number of TCs and in terms of financial commitments.<sup>10</sup> All countries of operations except Bulgaria, Croatia and Latvia did receive assistance through the TC programme.<sup>11</sup> Table 5 in Appendix 3 shows the significantly reduced level of TC activities in recent years on a per country basis.

The key focus of TC assignments was in four major areas: policy and regulation (55), technical and primarily investment related (49), training (22) and sector study (8). Further information on the TC assignments is contained in Appendix 3 (pages 6-8).

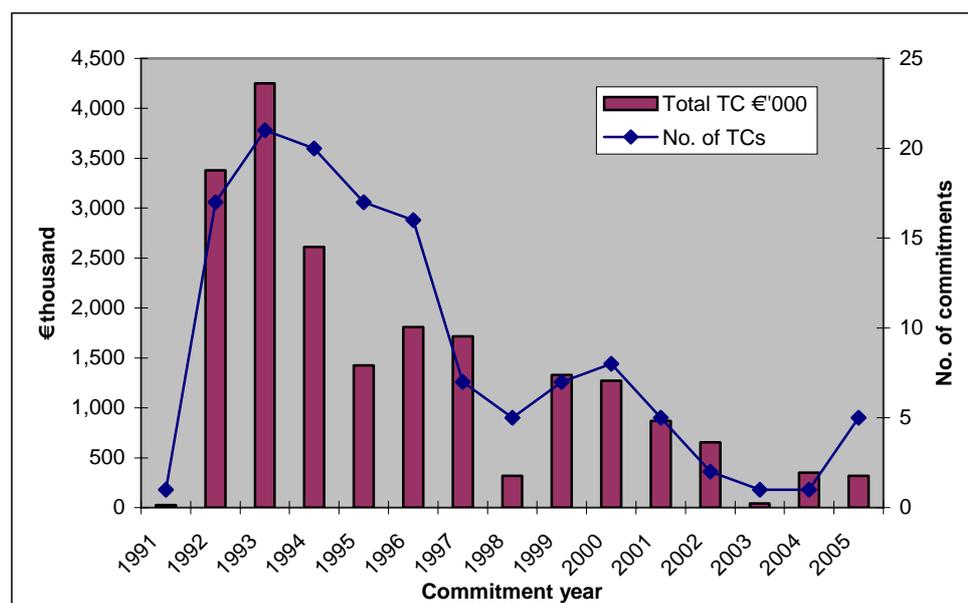
These TC assignments were separated from the telecom team in 1997 and moved to the Legal Transition Team of the Bank. The decline in the number of TC operations can also be explained by the administrative burden for TC mobilisation, which is a relatively lengthy and complex process. While the work load may be similar to the preparation of an investment operation, the staff compensation structure does not contain an incentive for TCs comparable to that for investment operations. This may also be a reason for the decline.

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<sup>10</sup> Desegregations of TC data by year, recipient country and function are provided in Appendix 3.

<sup>11</sup> The telecom team and LTT argue that small and well-targeted TC operations sometimes achieve better results than larger TC operations. There is no evidence from EvD evaluation reports to support this statement as a generally correct assumption.

Chart 2: Annual TC commitments in euro and number of TCs



The Bank also engaged in policy dialogue related to investment projects and other issues. This dialogue is not always documented and therefore does not lend itself to evaluation by EvD. The telecom team has maintained sector dialogue with various governments (such as Tajikistan or the Kyrgyz Republic) in different formats and levels of intensity, and results are documented in back to office reports.

### 3. Project level performance

This section summarises the findings of EvD evaluations of the projects and TCs in the Bank's Telecom Portfolio. It provides the level of evaluation coverage and the ratings on overall performance and transition impact.

#### 3.1 Project evaluation coverage

Table 3 shows the telecom projects by sub-sector and the evaluation coverage by OPERs and XMRA. EvD's evaluated projects by sub-sector and by regional country grouping are fully significant.

Table 3: Telecom projects and evaluation coverage, 1991-2005

Project type	Total investment (€000)	Sector investment (per cent)	Number of projects	Number of OPER	Number of XMRA	EvD coverage (per cent)
Fixed network	1,053,083	47	31	7	8	48
Fund	25,256	1	2	0	2	100
Media and advertising	181,702	8	18	0	10	56
Mobile and data	801,937	36	29	13	8	72
Other	184,729	8	10	2	3	50
<b>Total</b>	<b>2,246,707</b>	<b>100</b>	<b>90</b>	<b>22</b>	<b>31</b>	<b>59</b>

### 3.2 Summary of project evaluation results

Table 4 shows that 70 per cent of the evaluated telecom projects achieved an overall rating from EvD of *successful* or higher. This is an excellent result compared to the 57 per cent of all Bank operations rated at *successful* or higher.

Table 4: EvD's overall rating of telecom sector projects

EvD overall rating	Total	Telecom sector (per cent)	All Bank operations (per cent)
Highly successful	8	15	9
Successful	29	55	48
Partly successful	15	28	27
Unsuccessful	1	2	16
Not evaluated	37	-	-
Data set size	90	100	100

As for transition impact (Table 5 below), 95 per cent of the rated projects in telecom reached an EvD transition impact rating of *satisfactory* or higher. The equivalent number for all Bank projects is 76 per cent.

Table 5: Transition impact component of overall rating

EvD transition impact	Total	Telecom sector (per cent)	All Bank operations (per cent)
Excellent	20	38	8
Good	20	38	46
Satisfactory	10	19	23
Marginal	3	6	14
Unsatisfactory	0	0	7
Negative	0	0	2
Not evaluated	37	-	-
Data set size	90	100	100

Note: Totals may not add up due to rounding.

In conclusion, the Bank's telecom sector projects have performed very well as projects compared to the Bank's project level performance as a whole. This is particularly true when we consider the entire telecom portfolio from the outset. If we only review the outcomes in recent years, it could be argued that the transition impact rating levels have been somewhat lower (*good*).

## 4. Sector level performance

### 4.1 Introduction

The assessment of the sector level performance is distinct from the aggregation of the project evaluations because it introduces additional sector specific dimensions. The evaluation no longer focuses solely on the project's objectives and impact, but also on the sector policy objective and the impact of the policy in terms of presence in countries, the combined transition of the projects, technical assistance and policy dialogue in the sector along the original sector policy guidelines and their revisions over time.

After classifying the policy objectives according to major transition challenges (Table 6) to arrive at the overall assessment, the review considers first the *relevance* of the policy objectives, secondly the *efficacy* of sector activities compared with the policy objectives and thirdly the *impact* of the policies, taking into account both the presence and the degree of transition impact of the investment projects in the sector in each country. The transition impact is then reviewed against the remaining transition challenges. In order to derive meaningful lessons, four country case studies have been undertaken. Lastly, the review gathers those results into an overall performance assessment.

Table 6: Objectives of the telecom policies

TI Categories	Transition indicators	Policy objectives
<b>Structure and extent of markets</b>		
	<b>Competition</b>	Fund private sector operators to increase competition
	<b>Competition</b>	Fund new network, enhanced service and mobile operators
	<b>Market expansion</b>	Expand network coverage and range of services
	<b>Market expansion</b>	Support infrastructure that inter-links countries and regions
	<b>Market expansion</b>	Support smaller projects through funds
	<b>Market expansion</b>	Develop rural areas
	<b>Market expansion</b>	Extend into media, informatics, software, manufacturing, and so on
<b>Market-supporting institutions and policies</b>		
	<b>Privatisation</b>	Aid pre-privatisation restructuring and network development
	<b>Privatisation</b>	Transform incumbent operators into commercially-oriented, private companies
	<b>Privatisation</b>	Participate in privatisations
	<b>Frameworks for markets</b>	Use TC to restructure the incumbent and update regulations
	<b>Frameworks for markets</b>	Create an independent regulator
	<b>Frameworks for markets</b>	Rebalance tariffs to recover costs
<b>Market-based behaviour</b>		
	<b>Skill transfer</b>	Support private operators to improve operating efficiency
	<b>Demonstration effects</b>	Seed projects with high self-financing potential
	<b>Demonstration effects</b>	Increase pool of investment funds, including with other international financial institutions (IFIs)
	<b>Demonstration effects</b>	Be lead agent in executing project finance transactions
	<b>Improve standards</b>	Support private operators to improve capital efficiency
	<b>Improve standards</b>	Improve standards of corporate governance

#### 4.2 Relevance

The *relevance* of Bank sector activities is evaluated in terms of how well the projects addressed the Bank's sector reform mandate, the initial conditions and the sector challenges as described in the sector policies. This method counts how often the policy objectives address the transition indicators as shown in Table 6. The investment projects prioritised market-based behaviour, as presented in Table 7, but gave less attention to market-supporting institutions and policies. In the TC assignments, regulatory framework and market structure were also addressed. The review concludes that the focus on the three transition impact categories was appropriate. The focus on private sector projects made it difficult to build conditionality regarding market framework into such operations, since the government was not a party to the operation's loan agreement.

Considering the Bank's entire telecom investment activity, including TC activities, EvD rates the telecom sector as *satisfactory/good* with respect to the *relevance* of the Bank's sector reform mandate, the initial conditions, sector challenges across the countries of operations and the objectives of the Telecom Policy. This rating is also due to the fairly broad definition of sector objectives and the absence of a clear focus on the changing needs of Early Transition Countries (Chapter 1).<sup>12</sup>

Table 7: Relevance of 53 EvD rated projects to sector policy objectives

Transition impact categories	Transition Impact Indicators (TII)	Telecoms Sector Objectives	Rated projects addressing TII	Percentage of rated projects addressing TII
<b>Structure and extent of markets</b>				
	Competition	2	51	96
	Market expansion	5	47	89
<b>Market-supporting institutions and policies</b>				
	Privatisation	3	10	19
	Frameworks for markets	3	41	77
<b>Market-based behaviour</b>				
	Skill transfer	1	41	77
	Demonstration effects	3	43	81
	Improve standards	2	36	68

### 4.3 Efficacy

The *efficacy* of Bank sector activities is measured in terms of their presence and the success of those projects that targeted the policy objectives. The EvD has rated the overall operation performance (success rating) of each of these projects on a qualitative scale. Each project's success rating is applied to the sector objectives addressed by that project in order to derive an efficacy rating for that transition indicator for that project. The efficacy rating is made according to a standard evaluation scale of 1 to 4 ranging from *highly successful* to *unsuccessful*.<sup>13</sup> The right-hand side of the table averages the individual efficacy ratings to assess the telecom activities' efficacy in meeting the seven transition indicators.

<sup>12</sup> The Office of the Chief Economist questions whether it is reasonable to expect such a focus prior to the Early Transition Country (ETC) initiative. The review team believes that the needs already existed and warranted a more active identification.

<sup>13</sup> 1 = *highly successful*; 2 = *successful*; 3 = *partly successful*; 4 = *unsuccessful*.

Table 8: Efficacy of 53 EvD rated projects to the sector policy objectives

Transition impact categories	Transition Impact Indicators (TII)	Telecoms Sector objectives	Rated projects addressing TII	Percentage of rated projects addressing TII	Average efficacy rating
<b>Structure and extent of markets</b>					
	Competition	2	51	96	2.1
	Market expansion	5	47	89	2.1
<b>Market-supporting institutions and policies</b>					
	Privatisation	3	10	19	2.1
	Frameworks for markets	3	41	77	2.2
<b>Market-based behaviour</b>					
	Skill transfer	1	41	77	1.9
	Demonstration effects	3	43	81	2.0
	Improve standards	2	36	68	2.0

The table shows that the rated projects in each row were *successful* in each transition challenge category.

In conclusion, the review rates the *efficacy* of the EBRD's telecom sector work as *good*.

#### 4.4 Efficiency

This section considers how far the Bank was able to execute its activities in a cost effective manner. That is, did the Bank make or lose money in terms of its cost of capital when it carried out its activities, irrespective of the relevance, efficacy or transition impact that those activities had in the sector?

According to EvD's calculations, the EBRD's internal rate of return on its telecom loan book was about 4.4 per cent, versus about 3.5 per cent for the Bank's overall debt portfolio. As for the telecom sector investments in equity, EvD estimates that the internal rate of return has been about 15 per cent, versus 8.4 per cent for the Bank's overall equity portfolio. Other IFIs active in this area have also shown that telecom sector returns, compared to other sectors of operations, are generally higher in the review period.

The review rates the *efficiency* of the EBRD's telecom sector work as *excellent*.

#### 4.5 Transition impact across countries

A first set of results on the Bank's transition impact (TI) was provided in the project level performance section. They indicated that the aggregation of individual projects showed a very significant transition impact, and that telecom performed better than many other sectors of Bank operations (see section 3.2). However, as mentioned in this chapter's introduction (section 4.1), the sector level approach reaches an integrated assessment of the Bank's impact by including new dimensions such as:

- the Bank's presence in the countries of operations
- the quality of TC

- the effectiveness of policy dialogue combined with the impact of each individual project.

OCE used a similar approach in the Transition Impact Retrospective (TIR) papers, which the review team has further developed in the case studies (section 4.6).

The baseline data from the companion papers of TIRs 1 and 2 and the TI results from evaluation lead to a combined unique rating of Bank transition impact at sector level per country.<sup>14</sup> The results in Table 9 of the combined transition impact rating, associated with an assessment of the remaining challenges, are presented in Table 11. The telecom team achieved a significant transition impact in six mainly advanced countries, a moderate impact in 13 countries and minimal or no impact in eight countries of operations. Further large remaining transition challenges exist in 11 countries (41 per cent of the Bank's countries of operations). No investment operations took place in four countries of operations which all present large remaining transition challenges.

The Bank's initial focus on CEB region countries was appropriate. These more advanced countries, which were seeking EU membership, had made early reforms to the sector framework, supported by EU and World Bank assistance, which made them more attractive for international telecom investors. This context allowed the EBRD to participate initially with sizeable loans to governments preparing incumbents for partial or full privatisation, and to finance private sector entrants that had won new mobile telephony licences. In some cases, the first debt financing for such mobile operators was facilitated by the perception among commercial bank syndicate and sometimes equity investors that the EBRD provided mitigation of country risks. In subsequent operations, however, the relevance of the Bank's involvement was less obvious and had a lower transition impact.

It can be argued that the Bank should have developed earlier a higher presence in more countries (especially, for example, CIS countries with large remaining transition challenges).

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<sup>14</sup> Table 9 uses OCE's TIR 1, TIR 2 and the Assessment of Transition Challenges (ATC). The remaining challenges are taken from the companion paper of the 2005 OCE report. Additional information from EvD and the review team is also considered. Table 9 was developed from the background Table 6 in Appendix 3, which presents findings from TIR1, TIR2, and the EvD TI evaluation for individual projects and shows how the combined transition impact rating is derived from all these information sources. The combined assessment approach was recommended in the management comments on the review of country strategy evaluation. The approach may be applied to the sector evaluation process because the TIR and the ATC provide data at both the country and sector level in each country.

Table 9: Transition impact and remaining challenges

Transition impact	Remaining transition challenges		
	Small	Medium	Large
<b>Highly significant</b>			
<b>Significant</b>	Hungary Lithuania	Bulgaria Kyrgyz Republic Romania	FYR Macedonia
<b>Moderate</b>	Croatia Czech Republic Estonia Latvia Poland Slovak Republic Slovenia	Kazakhstan Russia	Albania Bosnia and Herzegovina Moldova Ukraine
<b>Minimal</b>		Georgia* Tajikistan	Belarus Serbia and Montenegro
<b>None</b>			Armenia* Azerbaijan* Turkmenistan* Uzbekistan

\* The telecom team had no investment operation in these countries

EvD concludes that the sector transition impact of the Bank's strategies, policies and investments programmes in telecom, taken as a whole, has been *satisfactory/good*. The Bank has had a substantial impact in some advanced and intermediate transition countries, but in 11 countries (41 per cent of the Bank's countries of operations) there still remain large transition challenges after 16 years of Bank operations.

#### 4.6 Deepening transition impact with country cases

The review team believes that the transition impact analysis needs to be deepened in order to derive meaningful lessons learned for future operations. In consultation with the telecom team, OCE and LTT, a wide range of country experiences were selected for case studies. One selection criterion was that the countries had a different Digital Access Index (DAI).<sup>15</sup>

The case studies can be summarised as follows:

##### *An early transition country and EU member*

The total commitments by the EBRD are €200 million, of which €144 million represents debt finance and €56 million represents an equity investment. The Bank's

<sup>15</sup>A DAI was compiled by the International Telecommunication Union in 2003 and presented in the World Telecommunication Development Report. The DAI ranks for the selected countries are: one early transition country and EU member; one EU accession country; one potential future EU accession country. See also Appendix 1.

portfolio covers expansion of classical telecommunications networks, implementation of new classical networks and the media sector (TV), as well as an internet operation. Four TC operations were allocated to the country and the total TC investment was €270,000. The TC operations were concentrated on technical and financial subjects, both investment oriented.

The country followed the transition event line as defined in the Bank's Transition Impact Retrospective. The country clearly focused on the EU accession criteria and decided early on that quality rather than speed was essential for a successful privatisation process. The results achieved fully justify the process as a whole. The EBRD's investment followed an initial World Bank loan (1987) which had facilitated the separation of telecommunications, postal and broadcasting services. The Bank's activities were well coordinated with the World Bank, the European Investment Bank (EIB) and the government. The Bank successfully contributed to the "success model" with four TC assignments and nine investment operations. The Bank's support was significant and well targeted, and supported the successful transition.

The review team is of the view that the Bank's transition impact in the telecom sector in this country was *significant* and the remaining challenges are *small* on the OCE ratings scale (see Table 9 above).

#### *An EU accession country*

The Bank's contribution to the development of the ICT sector in this country is substantial, with a debt financing of €370 million. Through six private and two public sector financings, the Bank participated in the financing of investment activities amounting to a total sum of €1.7 billion. Five TC assignments were implemented (€86,000) in 1992-93. Four involved technical support and one involved technical training, both focused on a telecommunications investment.

Today, mobile voice service dominates the ICT sector in terms both of subscriber capacity and of influence. Fixed line growth rates after the telecommunication company's first privatisation step remain modest (4.4 per cent annually) and the company has probably lost some opportunities to position itself in a new aggressive market environment, despite a dominant position in the fixed line sector. The relatively early privatisation of the incumbent fixed line provider had mixed results, and the sequence of sector reform events, in particular the delayed development of a strong regulator, was not ideal.

Despite the EBRD's substantial success in financing telecom sector development, more concern and involvement by the Bank in the broader policy context might have been supportive to a more comprehensive sector reform. The study team believes that the Bank should initiate more professional sector dialogues with government officials of different levels in order to disseminate the Bank's experience and to facilitate better appreciation of key sector issues, their economic interrelationships and their economic impact. Although the World Bank and the EU were strongly involved in the ICT sector reform, this should not be an excuse for the EBRD not to also take a more active role in these discussions in coordination with other IFIs.

The review team is of the view that the Bank's transition impact was *moderate* and the remaining challenges are *medium*.

*A potential future EU accession country*

The EBRD has contributed financing to three investment projects (€66.7 million total), two in the public and one in the private sector. Eight TC assignments have been allocated to this country (€488,500): three operations supported the International Transmission Network (ITUR) project with a technical focus, and five were in the area of policy/regulatory advice (four in 1995 and one in 2000).

The Bank's operations have not had a significant impact and the results were mixed.

The country is undergoing a difficult period where the drive to change is considerable, yet reform appears to be blocked by political influence and the continued dominance of central planning thinking and vested interest groups. Decision making power is concentrated at the highest levels of government, and various changes of key personnel and their main focus on the March 2006 parliamentary elections and the subsequent coalition negotiations and formation of the government have made it difficult to achieve agreement on new sector policies. The development of a transparent and attractive framework in the ICT sector has been delayed by at least 14 years.

Measured against the overall sector development requirements, the EBRD contribution remains at a modest level; mainly due to the unfavourable sector policy and the prevailing investment environment which both made it difficult to initiate activities. In the given sector circumstances, and in view of the main telephone company's poor conditions, the EBRD's support of fixed line privatisation is currently not very realistic. However, the strategic preparation of the privatisation process (including implementation as well as reorganisation and positioning of the company) are seen as urgent and unconditional prerequisites to any future attempt at successful privatisation. The recently established sector regulator is heavily constrained by lack of practical experience, little recognition as a regulator, lack of political neutrality, missing resources and the urgent requirement to harmonise about 100 existing regulations.

The review team is of the view that the Bank's transition impact was *minimal* and the remaining transition challenges are *large*.

*A Central Asian country*

The Bank's two public sector operations have contributed to the upgrade of the fixed line network which, despite all its deficiencies, is the "backbone infrastructure" of the ICT sector. The government cancelled a planned equity investment by the EBRD in support of a privatisation attempt of this company. A recently signed operation covers a loan to a mobile service provider. The Bank has delivered a substantial TC programme in three phases (1993, 2000 and 2002), focusing on the telecommunications regulatory programme, with total costs of €780,000.

There are still three different government agencies involved in regulation, which signals that a lot remains to be done on the road to one strong and independent regulatory agency. It is disappointing to see such a low digital access rating for this country, given the extremely fast growth of the extractive industries and other sectors of the economy. Compared to other countries undertaking rational sector reform, this country may have lost more than 10 years. The telecom sector issues have some similarity to the sector constraints of the previous country: partly a relic of the

previous political system and partly a top level political decision to delay sector reform and limit competition. Vested interest groups do not seem to think that a fully liberated market may ultimately provide more business opportunities for all.

The review team is of the view that the Bank's transition impact was *minimal* and the remaining transition challenges are *large*.

#### *Conclusion from case studies*

These cases suggest that an EU accession focus and strong support of a reform minded government by a variety of IFIs provides an ideal environment for potentially successful investment operations for the Bank. The Bank is unlikely to re-encounter this ideal in early and intermediate transition countries where there may be fundamental disagreement about the reform of the sector and the commercialisation of the incumbent fixed line provider. In one country, for example, the sequence of sector reform was not optimal: the early partial privatisation of the incumbent was not well prepared, and the late efficient restructuring of the sector (overlooking the specific local conditions), the relatively late installation of an independent regulator and a delayed rebalancing of fixed line tariffs and definition of interconnection rates created conditions for a less than ideal sector transition. In another country, meaningful sector reform has been blocked by political influence and vested interest groups. Elections and prolonged coalition negotiations did not facilitate agreement on sector reform. One country has a very low digital access ranking and has avoided a coherent sector reform with a systematic drive towards market liberalisation.

#### **4.7 Overall sector performance assessment**

The support of the Hungarian reform process, which started in 1985, is a good example of a sequence of Bank operations beginning in 1992 with a public sector loan to modernise and expand the public fixed telephone network. The same year also saw a private sector loan to expand the existing mobile voice service network. Through a total of nine operations, the Bank contributed substantially to Hungary's "success model", along the lines of the above mentioned set of priorities. The Hungarian approach was followed with various degrees of achievement by 15 other countries, with the support of the Bank.<sup>16</sup> The Bank was particularly active in these countries, with 90 investment operations, which are well represented in the EvD evaluations with remarkably positive results.<sup>17</sup>

However, 11 countries followed a different path and took measures, with or without Bank support, which had a lower transition impact in the sector.<sup>18</sup> Even if the transition indicator covers commercialisation, tariff reform, quality of the regulatory framework and private sector involvement, and does not directly assess the level of ICT infrastructure expansion, it shows indirectly that much remains to be done. This

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<sup>16</sup> The Bank's Transition Report 2004 ranks four countries (Czech Republic, Estonia, Hungary and Poland) out of 15 CEB and SEE countries (not all EU members) to be close to the "standards of an industrialised market" by allocating an Infrastructure Transition Indicator of 4.

<sup>17</sup> The overall achievement of objectives rating is *highly successful*, *successful* and *good* in 69 per cent of cases. The transition impact is rated *excellent*, *high* and *good* in 60 per cent of cases. The project financial performance is rated *excellent* and *good* in 49 per cent of cases. Additionality is rated *verified in all respects* and *verified at large* in 61 per cent of cases. Fulfilment of project objectives is rated *excellent* and *good* in 63 per cent of cases. Environmental performance is rated *excellent* and *good* in 80 per cent of cases.

<sup>18</sup> Nine countries were ranked 3 and two received a 2.

is also true for the ETCs, where many steps on the transition event line are yet to be prepared and need to be supported by TC and investment operations. It is of concern that the Bank's sector operations policy and the country strategies do not sufficiently clearly address the needs or support priorities of the early and intermediate transition countries in the telecom sector.

The excellent efficiency rating (profitability of Bank operations) should not lead to complacency: the so-called "low hanging fruit" (large operations with new mobile telephony licenses in the more advanced countries) has now been harvested, and the move further East heads into countries where a more intensive and time consuming sector reform dialogue is needed before significant operations can be concluded. The Bank may also consider a stronger role in universal access solutions (possibly including new financing models) and find appropriate ways to support the rollout of internet and broadband on a commercial basis to underserved areas.

In this context, it is concerning that the number of TCs and the financial commitments for TCs has declined so rapidly since 1999. The review team is of the opinion that more TCs are required to advance sector reform in early and intermediate transition countries. The design of the TCs should incorporate a higher degree of measurable conditionality, and should include review stages when a TC may be terminated in case the agreed conditions cannot be achieved. The review team also believes that the LTT's TC work in the sector should be strengthened and better integrated into the new sector strategy and the work of the banking team.

When the evaluation outcomes on telecoms projects are combined with the analysis of the sector policy indicators (relevance, efficacy, efficiency and impact), the strong results for efficacy and efficiency (*good* and *excellent*) are seen to be somewhat tempered by *satisfactory/good* impact ratings for relevance and impact (Table 10).

While the overall rating comes out as *successful*, its components indicate room for improvement in transition impact at sector level (as distinct from project level) in future operations. The sector approach emphasises coordinated Bank interventions at sector level (projects, TC, policy dialogue), in order to better support the Bank's activities in accordance with Articles 1 and 2 of the Bank's mandate (see section 1.2).

*Table 10: Summary of overall sector performance rating*

<b>Rating factor</b>	<b>Rating</b>
<i>Relevance</i>	<i>Satisfactory/good</i>
<i>Efficacy</i>	<i>Good</i>
<i>Efficiency</i>	<i>Excellent</i>
<i>Integrated impact at sector level</i>	<i>Satisfactory/good</i>
<b>Overall assessment</b>	<b>Successful</b>

The business environment for the Bank has substantially changed in this sector when compared to the period under review. The need for further resource transfers to highly profitable mobile companies is increasingly questionable, as illustrated by decreasing transition impact and lower additionality ratings in recent years. The few remaining large privatisations are challenging and most first and second mobile licences have been awarded. Many future project opportunities are in countries with large remaining transition challenges, where the average operation size may be smaller and the transition and banking risks will be higher. This challenge is not unique to the Bank

and its countries of operations. Other IFIs have chosen to review the focus of the telecom sector teams and see this sector as offering crucial tools for broadening and deepening sector and institutional reform and for increasing labour productivity and market access. Increasing importance is also given to using ICT to improve the social inclusion of isolated populations and to facilitate political empowerment.

## **5. Lessons and recommendations**

Considering now the entire set of countries of investment operations, EvD has generated a large variety of lessons through the evaluation process and feedback (Appendix 4 presents lessons learned by subject). A recurrent theme is the need for an increased focus on sector reform and for a longer term commitment from the Bank to ensure a successful reform process in areas such as the privatisation agenda and the approach to competition in the sector. The development of a stable and transparent regulatory framework is a prerequisite for a successful privatisation. The sector policy dialogue should have received more attention, even in cases of successful transactions. The Bank's Telecom Sector Operations Policy Papers have been very general in this area of sector wide reforms. They have not given real guidance on what type of investment projects, TC assignments and policy dialogue the Bank should focus upon at a given point in time. While it is acknowledged that a private sector project can have limited influence on regulatory policy, the Bank should keep assessing the risk posed by the lack of an independent regulator, especially when the competitor is a state-owned company. More detailed lessons and recommendations are given below on policy dialogue, Bank investments and TC assignments.

### ***5.1 Sector policy and country strategies***

- A new Telecom Sector Operations Policy is required in order to address changing needs more clearly, in particular the needs of early and intermediate transition countries.
- The country strategies reviewed for this study are not addressing the telecom sector adequately. They appear to reflect a likely lack of an ongoing professional sector dialogue to define more concrete and realistic operational objectives. A further strengthening of the relevant sector strategies in the country strategy documents is necessary to provide more specific operational guidance. It may also be useful to cover some elements of the telecom sector (such as universal access) under the infrastructure section.
- Both sector policy and country strategies should stress that the Bank views comprehensive sector policy reform as a prerequisite for large scale investment. There should also be a renewed emphasis on the developmental role of the Bank which continuously seeks to enhance and accelerate transition impact.

### ***5.2 Bank portfolio***

The Bank should consider:

- An intensification of the sector dialogue with countries of operation with large remaining sector transition challenges. This dialogue should help identify real sector issues, priorities, constraints, bottlenecks, gaps and investment barriers,

resulting from inappropriate country sector policies and a non-attractive investment environment.

- Future operations in order to restructure and upgrade fixed line telephone services (including fixed wireless) in some countries of operation where this remains a competitive and profitable business despite the impressive expansion of coverage of the mobile footprint. Past experience has shown that projects involving incumbent operators increase the scope for persuading the Government to introduce regulatory reform. The Review Team is also of the view that the Bank should be independent of any technology which should be defined by the market.
- Further intensify the development of new financing models (possibly Infrastructure Funds) to finance the replacement / expansion of existing classical infrastructure, new broadband and future infrastructure (e.g. Next Generation Networks, initially in CEB countries).<sup>19</sup> Alternatives already involve SME or DIF facilities to internet service providers to facilitate expansion of coverage.<sup>20</sup> Lessons learned from past operations in these areas may contribute to improved operation design and better monitoring procedures. In case these typically smaller and sometimes riskier projects become a more significant part of overall operations, substantial additional staff resources may become necessary.
- Gradually increasing investment operations in rural areas and support the establishment of Universal Access Funds. This may include the promotion of innovative concepts (e.g. the multipurpose telecentre concept in rural, remote and disadvantaged areas; e-strategies; VoIP)<sup>21</sup>. This may involve the development of financing models in which the public and private sector co-operate to cover infrastructure investment where the private sector alone may not take the risks involved.
- Reassessing the resource allocation for the Telecom Team in terms of staffing and level of in-house expertise on the basis of a new Telecom Operations Policy.

### ***5.3 Technical cooperation***

- The Bank should consider an intensification of Technical Cooperation in order to be more actively involved in providing guidance regarding an appropriate sequencing of sector reform steps taking into account the specific circumstances of each country. TC assistance should continue to be extended beyond sector reform design to the practical translation into application and the initial operational phase of regulation. Considering the remaining challenges in the early/intermediate transition countries' sector environment the Review Team believes that the Bank should allocate more resources to the Legal Transition Team (LTT).

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<sup>19</sup> The lack of basic ICT infrastructure is a handicap to allow Information and Communication Service (ICS) to positively impact on others sectors (economy, finance sector/micro-finance, agriculture, health, education, "blended learning", natural resources, environment, land management, etc.)

<sup>20</sup> A separate concept paper "ICT Strategy Direction: Business Incubators and Seed Funds for Small Businesses" was recently prepared by Motoo Kusakabe, senior counsellor to the President, with involvement of the Telecom Team for consideration by the Executive Committee.

<sup>21</sup> This raises questions regarding financial viability/sustainability ("Sound Banking criteria of the Bank") and may require cooperation with donors for funding of initial subsidies for start up period.

- Both the Telecom Team and LTT should continue to seek ways to build a higher degree of measurable conditionality into the TC operations by linking the future delivery of TC operations to specific sector reform decisions by the Government.
- TC should be used more actively to give guidance to Bank clients as to an appropriate sequencing of sector reform steps (see Transition Event Line as defined by the Bank) taking into account the specific circumstances of a country and conditions of the sector. (In particular, also to avoid premature privatisation of the incumbent fixed line operator.) The Bank may wish to intensify TC efforts in particular to countries receptive to sector reform dialogue
- Specific incentives for staff members undertaking TC operations should be introduced in the overall compensation levels to reduce the present negative bias when compared with investment operations.

## Digital Access Index 2003

Economy	Sub. Lines per 100 inhab.	Mobile sub. per 100 inhab.	Internet tariff as % of GNI	Int'l Internet Band width per 100 inhab.	Broadband subscribers per 100 inhab.	Internet Users per 100 inhab.	Infrastructure	Affordability	Quality	Usage	DAI	DAI rank
Sweden	65.2	88.9	1.1	10611.2	8.0	57.3	0.94	0.99	0.64	0.67	0.85	1
Slovenia	44.0	83.5	3.1	539.7	2.8	37.6	0.78	0.97	0.44	0.44	0.72	24
Estonia	35.1	65.0	3.9	409.6	3.4	32.8	0.62	0.96	0.44	0.39	0.67	28
Czech Republic	33.4	84.9	4.5	2189.1	0.2	25.6	0.70	0.96	0.45	0.30	0.66	31
Hungary	32.6	67.6	4.1	1048.3	1.1	15.8	0.61	0.96	0.44	0.19	0.63	36
Poland	29.5	36.3	4.1	163.3	0.0	23.0	0.43	0.96	0.35	0.27	0.59	40
Slovak Republic	26.8	54.4	6.3	1516.0	0.0	16.0	6.00	0.94	0.43	0.19	0.59	41
Croatia	39.0	53.5	4.4	41.2	0.3	18.0	0.59	0.96	0.31	0.21	0.59	42
Lithuania	26.4	47.6	11.2	94.8	0.6	14.5	0.46	0.89	0.34	0.17	0.56	47
Latvia	30.1	39.4	20.0	181.6	0.4	13.3	0.45	0.95	0.36	0.16	0.54	50
Bulgaria	36.8	33.3	8.3	10.1	0.1	8.1	0.47	0.92	0.25	0.10	0.53	56
Russia	23.9	12.0	5.6	61.2	0.0	4.1	0.26	0.94	0.32	0.05	0.50	63
Belarus	29.9	4.7	11.3	4.4	0.0	8.2	0.27	0.89	0.22	0.10	0.49	66
Romania	18.7	22.9	16.4	87.2	0.1	8.1	0.27	0.84	0.33	0.09	0.48	69
Turkey	26.9	33.6	9.5	10.6	0.0	7.0	0.39	0.25	0.25	0.08	0.48	70
Macedonia	27.1	17.7	13.3	24.2	0.0	4.8	0.31	0.87	0.28	0.06	0.48	71
Ukraine	21.6	8.4	26.0	6.3	0.0	1.8	0.22	0.74	0.23	0.02	0.43	88
Kazakhstan	13.0	6.4	27.4	4.3	0.0	1.6	0.14	0.73	0.22	0.02	0.41	97
Albania	7.1	25.9	24.8	3.9	0.0	0.4	0.19	0.75	0.22	0.00	0.39	100
Turkmenistan	7.7	0.2	20.0	0.1	0.0	0.2	0.07	98.00	0.06	0.00	0.37	111
Georgia	13.1	10.2	46.4	6.1	0.0	1.5	0.16	0.54	0.23	0.02	0.37	112
Moldova	17.0	7.7	49.6	7.7	0.0	3.4	0.18	0.86	0.24	0.04	0.37	114
Kyrgyzstan	7.9	1.1	54.0	0.2	0.0	3.0	0.07	0.46	0.91	0.04	0.32	120
Uzbekistan	6.6	0.7	53.8	0.2	0.0	1.1	0.06	0.46	0.11	0.01	0.31	121
Armenia	14.3	1.9	68.0	2.1	0.0	1.6	0.13	0.32	0.19	0.02	0.30	123
Azerbaijan	12.2	10.7	183.0	0.3	0.0	3.7	0.15	0.04	0.12	0.04	0.24	131
Tajikistan	3.7	0.2	362.3	0.3	0.0	0.1	0.03	0.00	0.12	0.00	0.21	133
Niger	0.2	0.1	683.6	0.0	0.0	0.1	0.00	0.00	0.05	0.00	0.04	179

Source: World Telecommunication Development Report: Access Indicators for the Information Society, International Telecommunication Union, 2003.

## Telecom Sector Background

### Business Environment and Related Challenges

The move from the State owned monopoly telecom providers to offering licences for private mobile telephony companies, as well as varying degrees of privatisation of the incumbent fixed line providers, led to dramatic changes in the telecom landscape in the Bank's countries of operations. Regulatory developments also reached varying degrees of improvements towards a more liberal market with competition between service providers to provide high quality and affordable telecom access ultimately with the aim to underpin increasingly knowledge-based economies which are able to compete in the global market place.

This process is not limited to the Bank's countries of operation: Worldwide a massive rollout of basic Information and Communication Technology Infrastructure (ICT: hardware, software, networks, and media for collection, storage, processing, transmission, and presentation of information (voice, data, text, images) accelerated in the 1990s: Now half of the world's households have a fixed connection, and the mobile footprint (i.e. the mobile coverage area) is covering as much as 77 per cent of the world's population.

The picture is more mixed for advanced information and communication infrastructure. Internet and broadband lags behind income share across the developing world. In particular, gaps remain in smaller towns and rural areas.

The unprecedented growth of the telecom industry came to a halt in the period 2000-2002 when the bubble burst and dozens of firms went bankrupt (including WorldCom in 2002). One of the main reasons for this was that during the technology bubble of the late 1990s, many firms made huge bets on the level and nature of future demand for communication which led to substantial investments in unnecessary telecom networks in the USA and other parts of the world. With hindsight it also became clear that many European firms had paid too much for 3G licences since the predicted explosion of demand (in particular of 3G data services) did not happen. These global developments had some repercussions on the Bank's countries of operations but did not stop the continued improvement of services. Local investors stepped in to replace foreign investors and the Bank encountered a renewed interest in its products which can reduce political risk and enhance chances of commercial bank syndications.

During the last few years, the telecoms operators have restructured and cleaned up their balance sheets. Three major focal points of activities seem to emerge:

- **Continuing rise of mobile phones**, which have overtaken fixed-line phones to become the most widespread communications devices on earth. Their number is expected to rise from 1.3 billion to 2 billion by 2007. They are increasingly used for more than just voice calls.
- **Growth of high-speed or broadband internet access**. This offers a new market for fixed-line operators who upgrade their existing telephone networks to make them broadband-capable.

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- A third area is the corporate-telecoms market. Large firms are seeking to cut costs and move operations overseas (**call-centre outsourcing and internet hosting**).

In terms of regional growth it is expected that mobile telephony will continue growing fastest in the developing world, where many people's first phone is a mobile. China and India will be leading the growth. Another booming region is central and eastern Europe, where mobile telephony provides a way to bypass creaking fixed-line infrastructure from the Soviet era. Once the mobile network is built, the subscribers only have to buy a handset. With pre-paid cards, credit checks are unnecessary and this has opened up mobile telephony to almost the entire population, in particular, if handsets are shared among many users.

The fast growing internet telephony market (VoIP: Voice over Internet Protocol) will have a strong impact on voice call revenues of fixed line and mobile operators.

Considering global statistics assembled by ITU, the World Bank and others, it appears that the continued rapid rollout of telecommunication services can increasingly be financed locally (even in developing countries) and the role of IFIs can only be seen as catalytic (and ideally underpinning broader and more balanced sector development) rather than driving investments in the sector. Over the 1990 to 2001 period, developing countries attracted US\$ 279 billion of private investment into telecommunications. IFC financing for this sector was US\$ 3.1 billion and for the same period EBRD disbursed about EUR 2 billion.

In light of the United Nations Millennium Development Goals (MDGs)<sup>1</sup> which provide an agreed political benchmark for measuring the progress of global development, the World Bank has repositioned its Global Information & Communication Technologies Department to use selected ICT projects to accelerate development towards achieving the MDGs. Generally speaking, EBRD acknowledges the MDGs but has not designed specific guidelines for considering them in the development of future operations.

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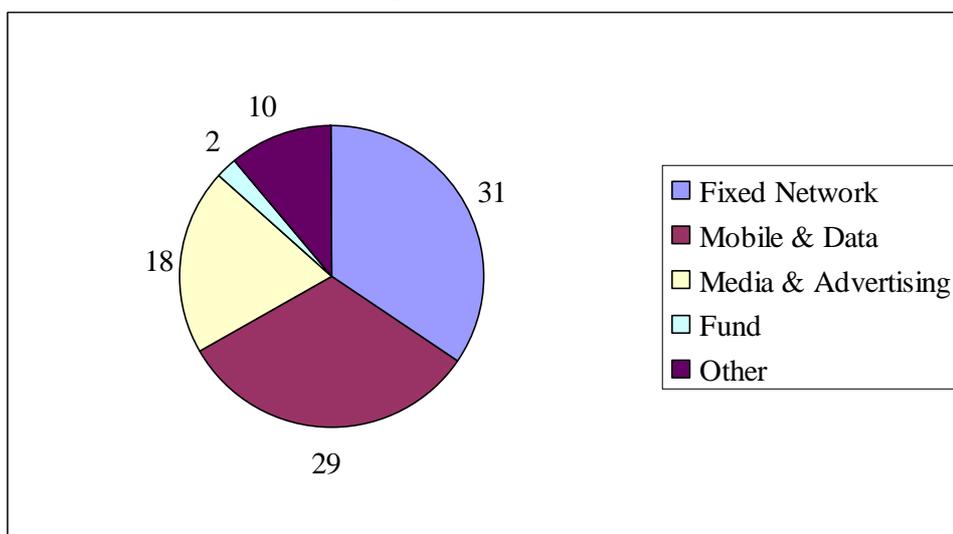
<sup>1</sup> The United Nations Millennium Summit in 2000 adopted eight specific Millennium Development Goals (MDGs) which provide an agreed political benchmark for measuring the progress of global development. In the same year, the G-8 initiated the "Digital Opportunity Task Force" (DOT Force) to harness the forces of new technologies to narrow social and economic inequalities. Further international efforts were undertaken in the World Summit on the Information Society in Geneva 2003 and in Tunis (November 2005).

## Main Aspects of the Bank's Investment Programme in Telecoms

### Investment Projects

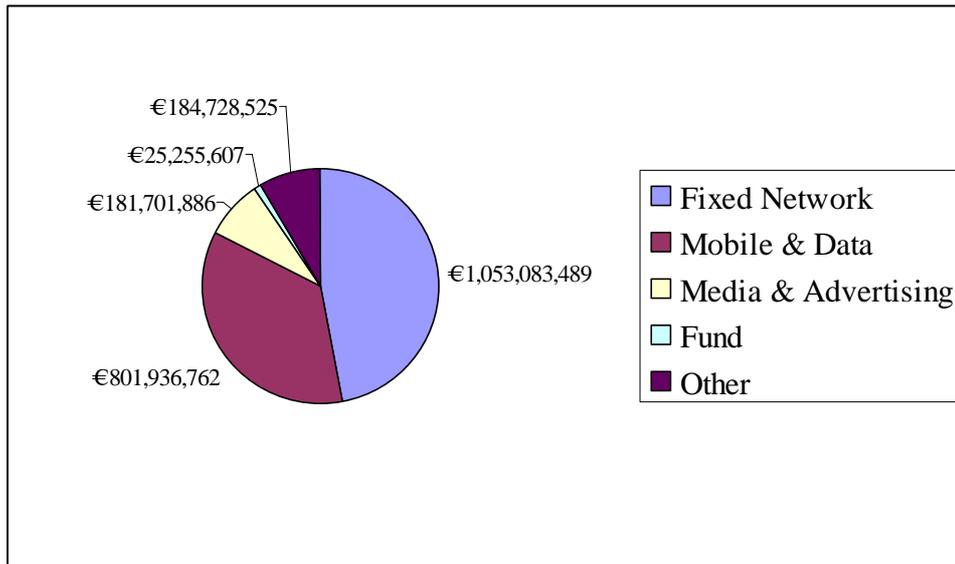
Over the period 1991 – 2005 the Bank undertook a total of 90 projects in the telecom sector. The following two Charts show the number of operations by sub sector (Chart 1) and the volume of the transactions in Euros by sub sector (Chart 2). The vast majority of operations (both numbers and value) is in the sub sectors fixed network and mobile and data network. Chart 3 illustrates that the vast majority of the operations are debt products.

**Chart 1:** *Number of Telecom Operations by Sub Sector*



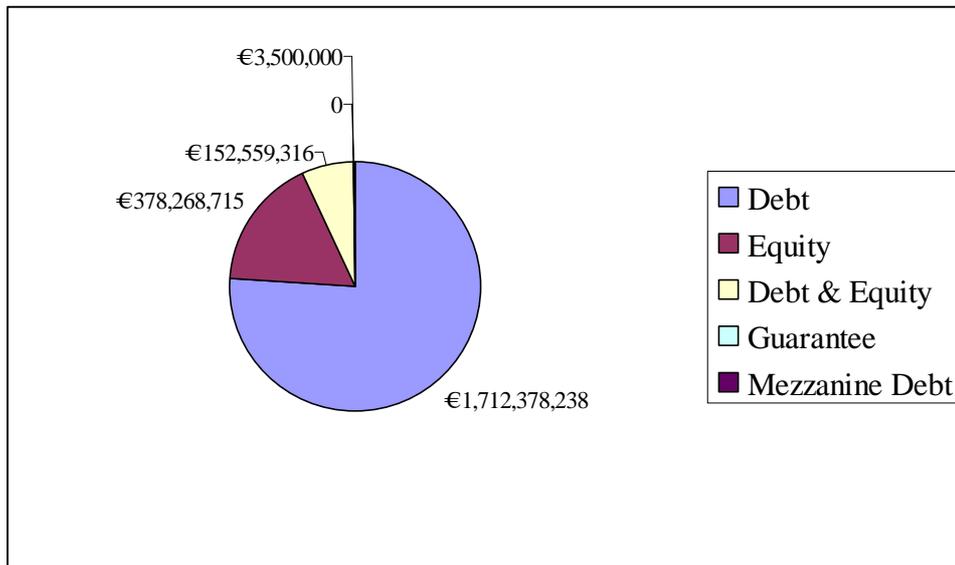
### APPENDIX 3

**Chart 2:** *Value of Telecom Operations by Sub Sector*



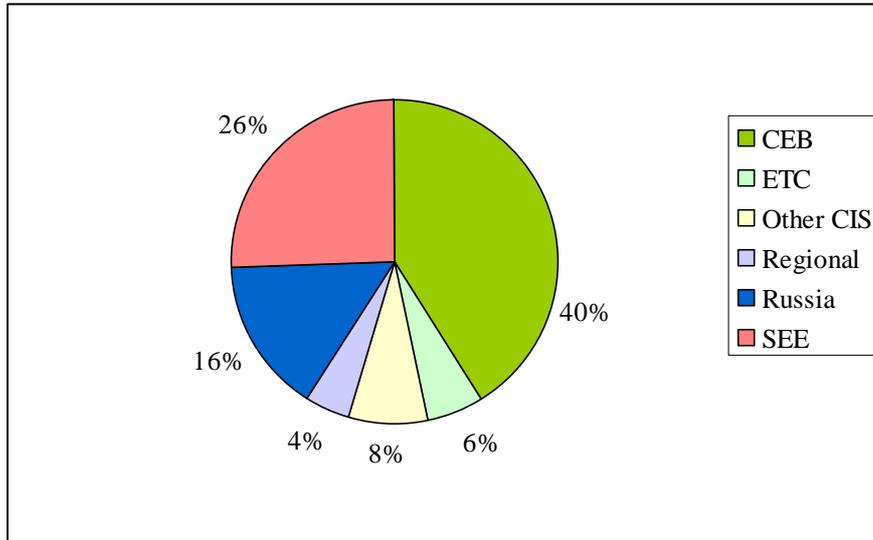
The following chart shows the high share of debt finance if one breaks down the portfolio by financing products:

**Chart 3:** *Value of Telecom Operations by Financing Product*

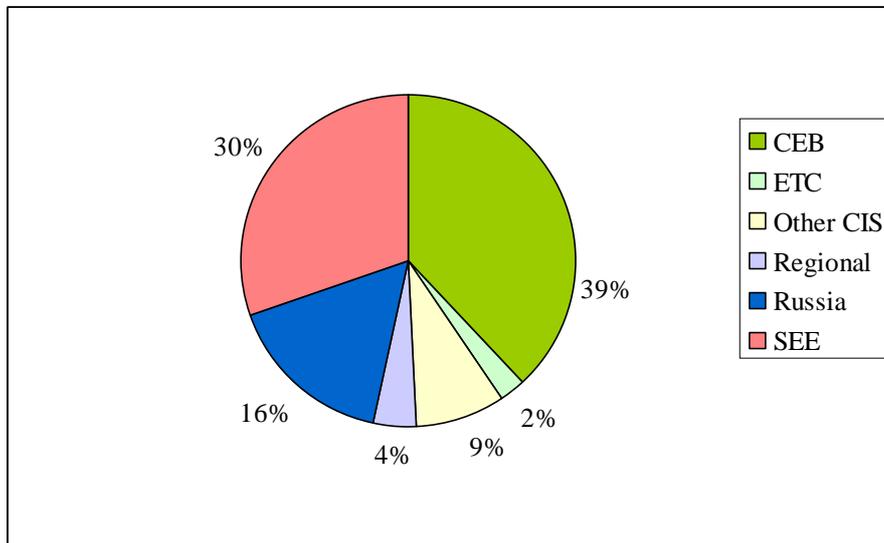


The next two charts show the total number of operations their total value by region. The top recipient countries by commitments are Romania, Russia, Poland and Hungary with 57% of the Bank's commitments (double check this since we do not have 2005 in this statement).

**Chart 4:** *Number of Telecom Operations by Region*



**Chart 5:** *Value of Telecom Operations by Region*



## APPENDIX 3

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**Table 1: Net cumulative investment volume by Country Transition Stage (EUR)**

Year	Early/Intermediate	Russia	Advanced	Regional	Grand Total
1994	274,349,391	7,175,473	303,670,450	0	585,195,315
1995	303,497,147	31,030,719	373,900,197	0	708,428,063
1996	304,811,536	57,557,284	376,518,490	0	738,887,310
1997	422,695,724	62,948,217	440,261,545	10,960,145	936,865,630
1998	514,697,800	59,694,395	508,204,152	36,441,586	1,119,037,934
1999	645,916,122	83,720,180	495,741,164	91,887,581	1,317,265,047
2000	711,830,795	123,412,373	562,174,014	96,553,022	1,493,970,203
2001	687,272,334	155,520,354	821,687,681	65,939,697	1,730,420,065
2002	745,713,258	138,519,348	870,007,695	60,761,946	1,815,002,246
2003	770,411,466	142,070,107	815,305,823	58,117,741	1,785,905,137
2004	814,664,213	280,526,071	825,886,347	57,777,081	1,978,853,713
2005	931,080,382	367,844,229	857,450,835	87,794,898	2,244,170,344

The above table shows that cumulative commitments in advanced transition countries are decreasing, whilst commitment growth continues in early/intermediate transition countries and especially, in recent years, also in the Russian Federation.

The next table shows the same data set by regional groupings and shows a growth of cumulative commitments in the CIS region, whilst a stagnation of commitment levels occurs in recent years in CEB and SEE.

**Table 2: Net Cumulative Investment Volume by Regions (€)**

Year	CEB	SEE	Russia	ETC	Other CIS	Regional	Grand Total
1994	303,670,450	190,112,601	7,175,473	8,480,104	75,756,686	0	585,195,315
1995	373,900,197	222,951,381	31,030,719	8,108,530	72,437,237	0	708,428,063
1996	376,518,490	221,612,695	57,557,284	8,375,614	74,823,226	0	738,887,310
1997	440,261,545	315,532,680	62,948,217	9,420,290	97,742,754	10,960,145	936,865,630
1998	508,204,152	395,166,894	59,694,395	27,005,290	92,525,616	36,441,586	1,119,037,934
1999	495,741,164	478,310,505	83,720,180	10,339,726	157,265,891	91,887,581	1,317,265,047
2000	562,174,014	502,881,641	123,412,373	11,153,593	197,795,561	96,553,022	1,493,970,203
2001	821,687,681	519,802,948	155,520,354	26,410,092	141,059,294	65,939,697	1,730,420,065
2002	870,007,695	604,264,661	138,519,348	22,306,587	119,142,009	60,761,946	1,815,002,246
2003	815,305,823	605,118,766	142,070,107	18,556,658	146,736,043	58,117,741	1,785,905,137
2004	825,886,347	658,178,982	280,526,071	21,027,479	135,457,752	57,777,081	1,978,853,713
2005	857,450,835	683,336,333	367,844,229	49,204,117	198,539,932	87,794,898	2,244,170,344

**Table 3: Number of Projects per Country per Year 1991-2005**

Count of Op Finance € (EBRD)		Year														Grand Total
Region	Country Name	92	93	94	95	96	97	98	99	00	01	02	03	04	05	
CEB	CZECH REPUBLIC	1	1	1							1	1		1		6
	ESTONIA				1											1
	HUNGARY	2	1		2	1	1				1		1			9
	LATVIA					1	1									2
	LITHUANIA			1						1						2
	POLAND	1				1		1	1		1	1	1			7
	SLOVAK REPUBLIC	1	1								1					3
	SLOVENIA		1								2					3
<b>CEB Total</b>		<b>5</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>1</b>		<b>33</b>
CIS	BELARUS	1														1
	KAZAKHSTAN								1				1		1	3
	KYRGYZ REPUBLIC			1												1
	MOLDOVA	1														1
	RUSSIAN FEDERATION	1	1		1	1			1	1	1		2	2	3	14
	TAJIKISTAN										1					1
	UKRAINE		1	1			1									3
	UZBEKISTAN													1	1	2
<b>CIS Total</b>		<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>2</b>	<b>1</b>	<b>2</b>		<b>3</b>	<b>3</b>	<b>5</b>	<b>26</b>
SEE	ALBANIA	1							1				1			3
	BOSNIA AND HERZEGOVINA							1				1				2
	BULGARIA	2								1			1	3		7
	CROATIA								1		2	1				4
	FYR MACEDONIA				1				1							2
	ROMANIA	2	1				1	1	1			1	1			8
	SERBIA AND MONTENEGRO													1		1
	<b>SEE Total</b>		<b>5</b>	<b>1</b>		<b>1</b>		<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>	
Regional							1		2						1	4
<b>Grand Total</b>		<b>13</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>90</b>

The above table shows the number and frequency of projects per country per year.

The top recipient countries are Romania, Russia, Poland and Hungary with 57% of the Bank's total commitments in the telecom sector.

### Technical Assistance Activities

The Bank has undertaken 133 TC operations in various areas (tables showing 150 will be corrected since they include some double counting of TCs). The largest number (48) had as its focus various aspects of the regulatory framework, policy and strategy. This includes 25 TC operations under the Legal Transition Programme (LTP) managed by the Legal Transition Team (LTT).

**Chart 6: Number of TC Operations by Focus, 1991-2005**

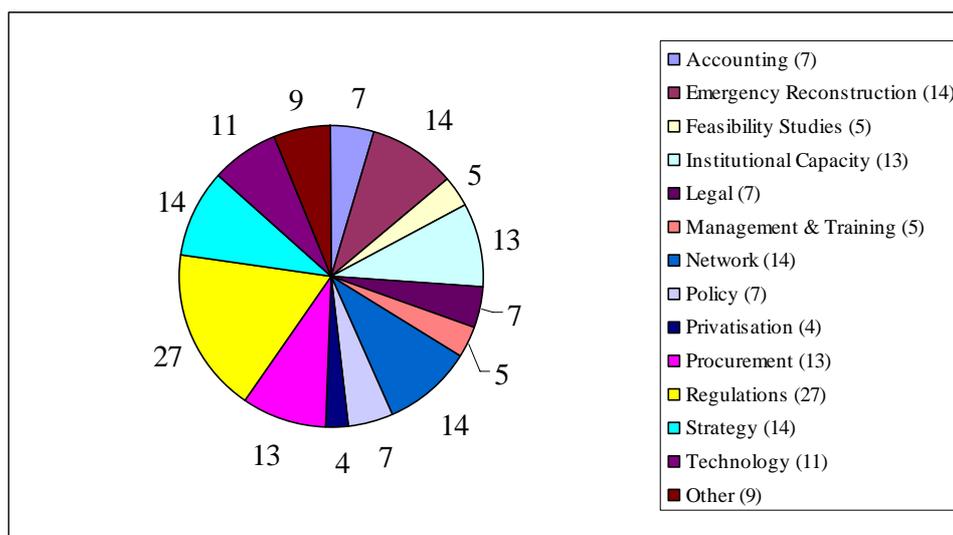
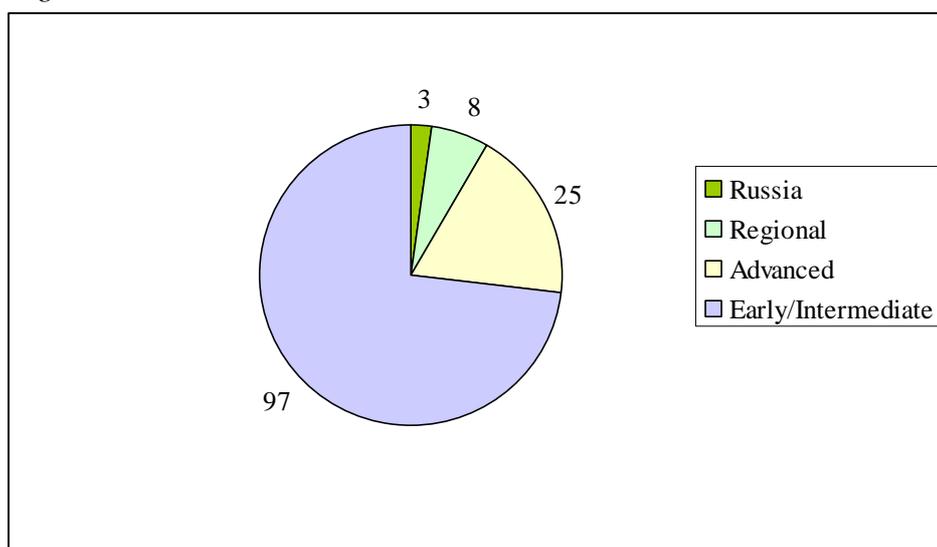
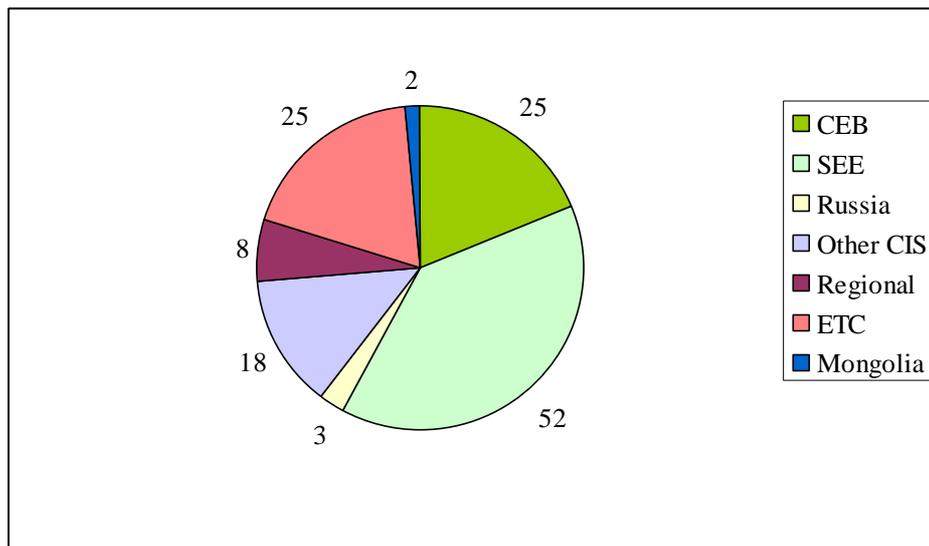


Chart 7 shows that the majority of TC Operations had as its focus Early/Intermediate Transition countries. Chart 8 shows TC Operations by regional groupings and shows that the SEE region was the main TC recipient by number of TCs.

**Chart 7: Telecom TC Operations, Cumulative Commitments by Country Transition Stage**



**Chart 8: Telecom TC Operations by Region, 1991-2005**



**Table 4: Number of TC Operations by Focus**

Project Type	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	Grand Total
Accounting			2	2	1		1		1							7
Emergency Reconstruction						1	1	3	8		1					14
Feasibility Studies	1		2							1	1					5
Institutional Capacity		2	7		2		1				1					13
Legal				2	2				2	1						7
Management & Training		2	1	1	1											5
Network		1	1	3	1	7	1									14
Policy					1	3	2	1								7
Privatisation					2									1	1	4
Procurement		3	2	4		1							2		1	13
Regulations		1	2	1	4	2	1	4	3	6	1	2				27
Strategy		5	2	4	1	1					1					14
Technology				3											8	11
Other		3	2		2	1					1					9
Grand Total	1	17	21	20	17	16	7	8	14	8	6	2	2	1	10	150

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**Table 5: Telecom TC Operations per Annum and per Country of Operation (Showing Decline of TC)**

Region	Country Name	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	Grand Total
CEB	CZECH REPUBLIC		3														3
	ESTONIA					1	1										2
	HUNGARY	1	1	1		1											4
	LITHUANIA		2	1	4		1										8
	POLAND			1				1									2
	SLOVAK REPUBLIC						1										1
	SLOVENIA		1	4													5
CEB Total		1	7	7	4	2	3	1									25
SEE	ALBANIA		4	8		4	1		3	2							22
	BOSNIA AND HERZEGOVINA						6	4	1	4							15
	FYR MACEDONIA				4	4											8
	ROMANIA		5	1													6
	SERBIA AND MONTENEGRO										1						1
SEE Total		9	9	4	8	7	4	4	4	6	1						52
Other CIS	BELARUS		1	2					1								4
	KAZAKHSTAN			1							2		1				4
	TURKMENISTAN						1	1									2
	UKRAINE				3	3					2						8
Other CIS Total		1	3	3	3	1	1	1	1	4			1				18
ETC	ARMENIA									1							1
	AZERBAIJAN					1											1
	GEORGIA										1	1					2
	KYRGYZ REPUBLIC				4			1									5
	MOLDOVA					2											2
	TAJKISTAN					1	5				2	2	1	1			12
	UZBEKISTAN			2													2
ETC Total				6	4	5	1			1	3	3	1	1			25
Russia				2									1				3
Mongolia															1	1	2
Regional					3							1				4	8
Grand Total		1	17	21	20	17	16	7	5	7	8	5	2	1	1	5	133

### Transition Impact and the Remaining Challenges

The following table 6 was used to build Table 9 in the main text. The table presents findings from TIR1, TIR2, Evd transition impact evaluation for individual projects and shows how based on all these information sources the combined transition impact rating is derived. The combined assessment approach was recommended in the management Comments on the Review of Country Strategy Evaluation. The approach may be applied to the sector evaluation process because the TIR and the ATC provide data at both the country and sector level in each country. The remaining challenges are taken from the Companion paper of the 2005 OCE report.

**Table 6: Bank Transition Impact and the Remaining Challenges**

Country	Average TII Rating based on Individual Telecoms Projects	2001 Transition Retrospective Telecoms Sector Rating	2005 Transition Retrospective Telecoms Sector Rating	Combined Transition Impact Rating (Avg TII, TIR1, TIR2)	Remaining Transition Challenges
Hungary	Hi Sign	Hi Sign	Moderate	Significant	Small
Romania	Significant	Hi Sign	Significant	Significant	One Large
Bulgaria	Hi Sign	Moderate	Significant	Significant	Medium
Lithuania	Significant	Significant	Significant	Significant	Small
FYR Macedonia	Hi Sign	Significant	Minimal	Significant	Large
Kyrgyz Republic	Hi Sign	Significant	Minimal	Significant	Large
Russian Federation	Hi Sign.None	Moderate	Moderate	Moderate	One Large
Bosnia and Herzegovina	Significant	Hi Sign	None	Moderate	Large
Croatia	Significant	Moderate	Moderate	Moderate	Medium
Poland	Moderate	Moderate	Significant	Moderate	Small
Slovak Republic	Significant - Moderate	Moderate	Moderate	Moderate	Medium
Slovenia	Hi Sign - Significant	Moderate	Minimal	Moderate	Small
Czech Republic	Moderate	Moderate	Moderate	Moderate	Small
Estonia	Hi Sign	Moderate	None	Moderate	Small
Kazakhstan	Moderate	Moderate	Moderate	Moderate	Medium
Latvia	Hi Sign	Moderate	None	Moderate	Small
Moldova	Hi Sign	None	Moderate	Moderate	Large
Ukraine	Hi Sign	Moderate	None	Moderate	Large
Albania	Moderate	None	Significant	Moderate	Large
Belarus	Moderate	Moderate	None	Minimal	Large
Serbia and Montenegro			Minimal	Minimal	Large
Georgia*	None	Minimal	Minimal	Minimal	Large
Tajikistan	None	None	Moderate	Minimal	Large
Armenia*		Minimal	None	None	Large
Uzbekistan		None	Moderate	None	Large
Azerbaijan*		None	None	None	Large
Turkmenistan*		None	Moderate	None	Large

## Lessons Learned by Subject

### Introduction

The focus of the subsequent Lessons Learned summary is on sector specific issues rather than on those discussing banking practice. The following is a selection in view of the objectives of EvD's Study.

The information sources are EvD's OPER Reports and XMR Assessments.

Subjects and Lessons Learned written in bold types are taken from OPER Reports. The XMRA information is presented in italics. The wording of EvD documents (Chapter Lessons Learned) has not been changed.

Subject	Lessons Learned
<b>Political Commitment</b>	
Importance of political commitments	<b>Sufficient and transparent political commitment along with well-defined economic objectives are the required conditions for the various phases of privatisation of publicly owned utilities.</b>
Use of proceeds from privatisation	<b>For the sector, it would be ideal if the proceeds from privatisation benefit the privatised utility.</b>
<b>Sector Policy</b>	
Sector dialogue	<b>The Bank, being a development finance institution, should pay more attention to the provision of universal service.</b>
<i>Sector policy development involving the Bank's legal transition team</i>	<i>The Bank needs to encourage the continuous involvement of the relevant authorities in the development of their sector policy with the Bank's legal transition team by providing additional TC funding for this purpose, as the Bank's influence via the financing of the project alone is only rarely adequate to do this.</i>
Sector regulation and introduction of competition	<b>The Bank should advise local telecommunications authorities on setting up a regulatory framework relating to the introduction of competition, so that the optimum trade off between level of competition and market potential can be found and a balanced sector development can be secured.</b>
Long-term approach to the competition in the sector	<b>Risk of creating a duopoly market in the telecom sector. A long-term approach can help the reform and liberalisation process in emerging economies. For the successful outcome of the restructuring of a formerly state owned telecommunications sector, it is important to harmonise both privatisation agendas and develop an appropriate and independent regulatory framework. The Bank should take a long-term approach for its telecom operations.</b>
<i>Competition between different technologies for delivery of broadband internet and telephony</i>	<i>CATV is a competitor in the telecoms sector since CATV operators can use their network to provide broadband internet and in some cases even be stronger competitors to the incumbent telecoms operators than (sometimes financially much weaker) alternative telecom operators.</i>

<p>Tariffs /Tariff re-balancing</p>	<p><b>As part of the development of the legal and regulatory framework, early preparation of internationally accepted fair pricing formulas for capacity renting is important. Legal framework and regulatory backing are essential.</b></p> <p><b>The important increases of local tariffs and introduction of time based usage charges can face strong opposition (in particular, when to be achieved in a short period of time). Adequate government support should be secured from the outset.</b></p> <p><i>Tariff covenants should be set out in terms of the objective to be satisfied rather than prescriptively and should not be in contradiction to existing law.</i></p> <p><i>Tariff setting regarding telecommunications services in less developed economies should be made with the application of general industry parameters.</i></p> <p><i>A proactive approach to tariff policy would be the inclusion in loan documents of covenants relating to international benchmarks.</i></p>
<p>Difficulty in reconciliation of different goals</p>	<p><b>Offer financing to the incumbent only one time if the transition impacts of the first deal do not come about as planned. Financing a challenger develops market competition, while supporting the incumbent may stifle competition. Only direct investments in the incumbent’s network can quickly improve services. But the lack of competition may let the incumbent continue its “lazy life”. One way to reduce this risk is to make it clear from the beginning that, next time, the EBRD will be financing new competitors rather than the incumbent.</b></p>
<p>Strong regulator required for the efficient functioning of a liberalised telecom market</p>	<p><b>Sector policy dialogue cannot be ignored even in cases of successful transactions. It is important for the Bank to continue a close sector dialogue with the Government, particularly when it is involved in both a fixed line and a mobile operator, and the Bank’s influence can be expected to be greater. The key objectives should be to provide assistance for ensuring a properly functioning telecommunications sector.</b></p>
<p>Adapting the regulatory environment at the proper time</p>	<p><b>Prior to privatisation of publicly owned utilities involving a strategic investor , the legal and regulatory environment should be adapted to ensure that the strategic investor is confident that the rules of the game within the sector are transparent and sustainable during and after the privatisation process</b></p>
<p>The creation of an independent Regulatory Agency</p>	<p><b>With the aim to stimulate institutional development in the sector, the Bank should make sure that its assistance covers all the facets of a sustainable legal and commercial environment for a sector such as telecommunications. Countries in transition often have difficulties in designing the projects, obtaining approval from a reluctant parliament and implementing the legal structure necessary to provide an independent regulatory structure. The Bank should accompany the procedure to its conclusion.</b></p> <p><i>Although a private sector project can have limited influence on regulatory policy, the Bank should asses the risk posed by the lack of an independent regulator, especially when the competitor is a state-owned company.</i></p>

Complexity in developing a fully transparent regulatory regime	<p>Evolving regulatory regime in telecommunications may require an active engagement in dialogue by the Bank via legal transition team or other appropriate measures. An operation cannot simply assume that it automatically will facilitate the establishment of a transparent regime and may need to identify from the outset linkages to engage local authorities in an active dialogue. This may take place via a legal transition element, a TC or a close co-ordination with other multilateral or bilateral agencies.</p> <p><i>Development of regulatory and legal frameworks is a long-term issue, requiring full commitments by the authorities.</i></p>
Thorough legal and regulatory framework development form an essential part of project design	<p><i>The development of the legal and regulatory framework is a long-term job which, in less developed countries such as Albania, will require significant resources and assistance. Nevertheless, it has been shown in other countries of operations that development of a stable and transparent regulatory framework is a prerequisite for a successful privatisation.</i></p> <p><i>A stable and non-interfering regime is essential for attracting new investment, and a prerequisite for successful privatisation.</i></p>
Weak regulatory environment in Russia and absence of an independent regulator	Well defined and predictable regulatory environment and commitment of the authorities to reform is a key factor to the success of a project. In the case of a purely private investment, the Bank must rely on TC programmes to progress legal transition and achieve a more investor-friendly business environment. Through pertinent demonstration effect, the investment itself should, however, bring its own contribution towards such goal.
<b>Licence / Concession</b>	
Licence / Concession	<p><b>In private sector utilities operation, which are based on exclusive licences or concessions, the rationale for the Bank’s involvement could be to improve the domestic legal and regulatory framework.</b> <i>Exclusive telecom operating licences should only be accepted for the start up of a project.</i></p>
Terms of approved telecom concessions	<b>The Bank should carefully assess the contents of approved concessions</b>
<b>Transition /Additionality</b>	
Sequencing the different elements of the project. Links between financing and regulatory reform. The sequence of project elements for reform.	<p>The financing to actual measurable regulatory progress: It makes sense to offer financing for certain types of very basic infrastructure independently of regulatory progress; examples are the backbone network and satellite terminals to support rural access. Even if one cannot prove that the investments in such basic infrastructure are commercially viable, the positive secondary effects on the overall economy should dominate. But anything else that is supposed to have a commercial rationale, should receive money only as the appropriate regulatory regime is built up.</p> <p><b>The purpose of the Bank’s involvement in any country is to contribute to the overall development and to speed up the transition. It may sometimes be necessary to stick to some pre-mediated sequence of transition, and accept delaying secondary elements of support, such as financing capital expenditure, until the major steps, such as regulatory reform and pre-privatisation equity investments, have been achieved.</b></p>
Strengthening of covenants in loan agreements	<i>When possible, fundamental issues often related to transition impact should be addressed in the loan agreement as conditions for effectiveness rather than as part of affirmative covenant.</i>

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Stronger emphasis of the Bank's additionality and transition impacts in the complex market	<i>A commercially ready-made deal would limit the Bank's opportunities for value addition to the project. The Bank's sector strategy may need to be pronounced with emphasis of the Bank's mandate, transition impact in particular. It could help as guidance for positioning the Bank as a front runner rather than a follower, avoiding fragmented investments, and devising a project with potential clients to maximise the Bank's value addition to the market in transition.</i>
The Bank's additionality can be best demonstrated in difficult markets	<i>When a whole industry is experiencing a downturn worldwide, the specific economic environment and prospects in a country of operation may not be sufficiently enticing for the investor's community to accept sector risk, irrespective of the strength of the foreign strategic sponsor. Under such circumstances, the leadership provided by the Bank may operate as a catalyst and make feasible a financing that would otherwise not even be considered.</i>  <i>Additionality would be better protected if the Bank would use "market appreciation" in its negotiations with clients. The Bank would implicitly agree with its clients that when market conditions evolve so that commercial banking transactions can be completed without involvement from the Bank, the Bank may decide to opt out and to let the commercial sector fulfil its functions.</i>
<b>Privatisation</b>	
	<b>Sufficient and transparent political commitment along with well-defined economic objectives are the required conditions for the various phase of privatisation of publicly owned utilities (see also Sector Policy).</b>
	<b>For the sector it would be ideal if the proceeds from privatisation benefit the privatised utility (see also Sector Policy).</b>
Critical decisions	<b>The Bank should not hesitate to use financial pressure i.e. apply special financial conditions to move the privatisation process forward.</b>
The advising role of the Bank to the Government should not stop at privatisation. The importance of portfolio management by the State	<b>When assisting in privatising State companies, attention should be focused on ensuring that the State appoints qualified representatives on Supervisory Boards.</b>
Lack of understanding between the Strategic Investor and the Bank	<b>As a lender, the Bank should make explicit to the Government before privatisation takes place, its intention to follow the "implementation" of the privatisation process.</b>
Institution building in the company destined for privatisation	<b>When possible, a two step approach, including a pre-privatisation phase towards privatisation, is more rewarding for the host country.</b>
<b>Project Planning</b>	
Ascertain proper project planning	<b>Project planning should attempt to research and take account of the implications of possible future developments of the sector.</b> <i>Economically, it is not feasible to design a digital overlay network (DON) to the fixed wire telephone network to serve only the business customers.</i> <i>One cannot assume that a project approach, which is successful in one country, will necessarily be successful in another country and vice versa.</i>

<b>Appraisal</b>	
Appraisal Optimism	<b>It has often been experienced with Bank operations that the assumptions behind the commercial and financial objectives prove to be highly optimistic.</b>
Bad debts control	<b>During appraisal, the Bank should ensure that the company has sufficient accounting systems with the financial management expertise to ensure proper credit policy and management.</b>
Mitigate appraisal optimism	<b>The Bank should always carry out an independent review of key assumptions in appraisal projections. The OPER Team concludes that an early identification of sources of appraisal optimism will increase an operation's quality at entry.</b>
Transition Event Line	<b>Transition Event Line analysis can improve project appraisal. The Bank should appraise projects along the "Transition Event Line" as described in the "Transition Impact Retrospective (April 2001)". Such appraisal would better highlight challenges to transition impact, define achievable objectives, and plan for more time to get results.</b>
Definition of objectives in the Bank Projects	<p><b>The objectives of Bank projects should be measurable. A dialogue around measurable objectives between the Bank and the client would increase the understanding of the Bank's role as a development finance institution.</b></p> <p><b>Sector transition event lines could be an instrument for consolidating the achievements in the sector.</b></p> <p><b>Focus is initially mainly on service growth, while the regulatory aspects become increasingly important when the sector develops. In a fully privatised sector, the universal access provision would become a high priority, which of course is less relevant for Bank operations in countries which are in the early stages of the transition event line. The Bank's TIM Operations Policy (BDS99-13) is very general and gives no guidance on what type of projects the Bank should focus upon at a given point in time. The use of the sector transition event line is a good instrument in assisting in the project selection for a particular country depending upon its place on the Transition Event Line.</b></p> <p>Care needs to be taken in applying analysis of national data from monopoly operators to specific regions and local competitive operators, because economic performance and trends may be obscured.</p> <p><i>The engineering due diligence needs to be fully incorporated into the financial model and the cost implications need to be tested.</i></p>
<i>Flexible Structure allowing the Lender's discretion would mitigate regulatory risks</i>	<i>Risks associated with UMTS were considered not negligible at appraisal.</i>
<i>Market demand</i>	<p><i>It is important to undertake detailed due diligence on the potential demand from the commercial banks. Expertise and market knowledge of the arranger can mitigate the syndication risk.</i></p> <p><i>Ensure the accuracy of the cost estimate. Due to the fast developing technology and the increasing competition among international suppliers, it is often difficult to estimate physical costs.</i></p>

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<b>Equity investment</b>	
Seek equity participation in greenfield projects	<b>The Bank should always seek equity investments in operations such as EDN/Sovintel, where the project is of a “greenfield” nature, characterised by high business risks, high profit and high transition impact potential.</b>
Equity instead of loan	<b>The Bank should always seek to negotiate equity-based investments in telecom projects like Eurotel, when the project has (i) strong “marketpull” nature in terms of insufficient service on the market; (ii) high profit potential; (iii) low capital cost/subscriber technology lowering the operating leverage of the company, (iv) and a volatile operating environment which can cause unexpected delays in reaching full scale operations and potential restructuring of the project.</b>
Valuation of companies in which the Bank makes a large equity investment	<b>Importance of company/shareholder evaluation when the Bank makes large equity investments in connection with an IPO.</b>
<i>Investing in equity</i>	As a general rule, the Bank should be in a position to demonstrate that through an investment in a project it will directly contribute to Transition Impact. <i>The Banking Team should refrain from building unrealistic expectations in terms of Transition Impact for equity investments. Often, the benefits of such operations are market driven, an area where the Bank may not have much leverage and where shareholders agreements may more difficult to reach.</i>
<b>Services</b>	
Focus on distribution on service oriented business	<b>For service-oriented projects in historically centrally planned economies, the Bank should ensure that the development of the distribution network is strongly supported by the project sponsors.</b>
Assessing the viability of UMTS services in the countries of Bank operations	<b>The Bank should closely monitor the developments regarding UMTS in the various mobile telephony companies in its countries of operations and maintain a dialogue on the viability of these services.</b>
<b>Management</b>	
Turn-around of large state-owned enterprise requires strong outside pressures	<b>Turning around a formerly state-owned monopoly telecommunication operator to meet the demand of service and to survive in a competitive environment takes a long time. There must be outside pressure strong enough to change the way of working in the company.</b>
Strong Management	<b>The Bank needs to carefully assess key managers and their selection in joint venture operations.</b>
Management needs to focus early on transition issues	<b>Management focus on training and promoting local managers is a key ingredient of a highly successful operation.</b>
Developing and motivating local managers	<b>Early focus on local staff development is crucial for long-term operating success.</b>

<b>Implementation / Monitoring</b>	
Relations with the Sponsor	<b>Senior Management contacts with the Sponsor are critical to relationship management.</b>
Earning the right to deep involvement	<p><b>The Bank must take strong material commercial risk to justify strong monitoring of projects. Better communication of the Bank's role as a Multilateral Development Bank and value of the Bank's preferred creditor status can help justify stronger monitoring in such cases. The Bank must deliver value-added to justify strong involvement in a project.</b></p> <p><i>Project support mechanisms need to be callable during the implementation of a project, not only at its "Completion".</i></p> <p>Turnkey contractors without established track records and operations in the Eastern European market are as big or bigger risk than the Company itself. <i>Where the Sponsor with the real operating experience is not in direct control, care must be taken to ensure that his commitment and attention to the project extends beyond the financial.</i></p> <p><i>The Bank has obliged ST (Slovak Telecoms) to employ implementation consultants to mitigate construction risks whereas this proved to be of little value because ST already possessed the required skills. The lesson learned is that the Bank should develop a more specific risk/capability assessment to avoid such unnecessary expense.</i></p> <p><i>Project inherent policy/strategy and institution building components, such as stipulated tariff increases and corporatisation/privatisation of equity, require adequate provisioning in terms of implementation and monitoring capacity and capability.</i></p> <p><i>Incorrect risk identification and mitigation efforts will only hamper the project implementation and completion.</i></p>
Co-ordination and monitoring	<i>Adequate level of co-ordination and monitoring should be organised by the Bank to ensure the optimal use of several simultaneously applied TC funding components. Recognition must be given to the significant Bank resources required to monitor large infrastructure projects and institutional development TCs.</i>
Proactive monitoring	<p><i>It is important to closely monitor the project and develop a strong relationship with the client in order to proactively and timely propose new financing solutions and retain a high quality customer. In a fast growing company, the existing financing structure may become limiting to the development of the company and a good sector knowledge combined with solid monitoring can give the Bank an advantage in the development of new proposals for an existing client.</i></p> <p><i>Close monitoring is required for the fast-moving market. UMTS investors need to monitor closely GSM market, new entrants in particular, and the regulatory environment, not only in Poland but in the Region.</i></p>

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<b>TC Programme</b>	.
	Before embarking on a TC programme, it is vital that the client commits the necessary resources, and a careful explanation of the purpose of the TC helps the client to better appreciate the need for a strong commitment.
	Use of TC projects: Beneficiaries of TC should agree to the terms of reference of technical co-operation consultant contracts. It would confer the beneficiaries with more responsibility and provide better visibility to the donor.
<i>Importance of a well tailored TC package</i>	A well tailored TC package may prove essential in improving the chances for a new project and raising the performance level of the client. TC can be used as an important tool to seek out potential deals with the client, be it rehabilitation of operations or new business opportunities.
<i>Local assembly of telecommunications equipment</i>	For the long-term success of a project, it is important to design the project concept from the very beginning for a competitive environment and commit the sponsor to diversify. The Bank should closely supervise the Project's business policy even when there is no credit risk associated with the Project because of a first class guarantee. <i>At appraisal the Bank needs to evaluate the possible risks associated with the privatisation of a Project's major client.</i>
<i>Importance of the Bank's in-house technical expertise</i>	<i>The in-house technical sector expertise is particularly important in a start-up project where delays and changes occur and close monitoring of covenants and milestones is continuously required for an effective dialogue with the borrower and in some exceptional cases also an adjustment of the tight financial covenants to a stronger financial position of the borrower.</i>